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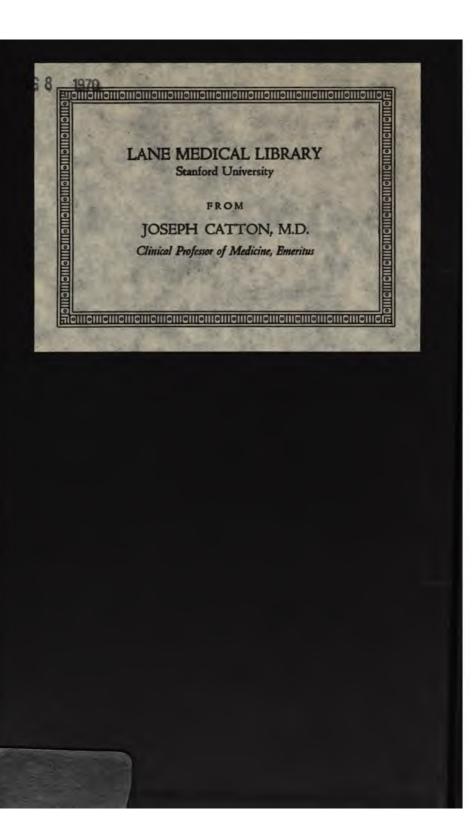
INSANITY:

ITS CAUSES AND PREVENTION



L341 W72 1908

CHARLES WILLIAMS, LR.C.P. &c.





"Insanity is a great and progressive evil. Its progress of late has been almost phenomenal, and the expense it entails upon the public almost insupportable. If it is to be held in check, this can only be done by educating the public, 'the man in the street,' upon the subject."—(Extract from an Address by the President of the British Medico-Psychological Association).—Vide "Journal of Mental Science," January, 1904.

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PREFACE.

PREVENTION is important in every disease, but infinitely more so in Insanity than almost any other, as nearly all other diseases are fairly amenable to treatment, and the recovery rate is tolerably satisfactory. With Insanity, however, the reverse is the case, and hence it is no wonder that a leading English alienist, speaking on this subject a few years ago (1900), gave utterance to the following—"Of the importance of prevention rather than cure I think there can be no doubt. Whether the ensuing century will be marked by an arrest of insanity at its sources is, however, a matter on which we cannot speak with certainty, but it seems to me the direction in which our efforts should tend."

With the above remarks I thoroughly agree, and this essay will, I hope, prove a successful effort in the direction indicated.

As will be seen during the course of the work the writer's plan has been to take one of the last annual Reports (Sixtieth Report, published June, 1906) of the English Commissioners in Lunacy, and having put down their list of Causes of the disease, to deal with each cause and its remedy separately.

Two or three other remarks I feel constrained to make, and these are concerning the style in which this treatise is written, and the freedom with which certain delicate questions have been touched upon. I am well aware that for this I may be taken to task by some, but my reply to any objection that may be urged on these grounds is that I am one of those who believe that on this subject it is most important—indeed absolutely necessary—that the Public should be fully and thoroughly educated, and therefore not only have I not shirked the unwelcome duty of dealing freely with certain matters which I would much rather have reserved for some treatise intended for medical readers only, but I have also tried to write throughout in such a way as to be as easily understood by lay readers as by members of my own profession. I trust this explanation will be sufficient for all inclined to be critical, but in case it should not be, I beg to quote in justification of my procedure the following remarks by a former President of the British Medico-Psychological Association, who, in an important address on this subject a few years ago, said:—"Insanity is a great and progressive evil. Its progress of late has been almost phenomenal, and the expense it entails upon the Public almost insupportable. If it is to be held in check this can only be done by educating the Public, 'the man in the street,' upon the subject."

And with these wise remarks all sensible men will, if I mistake not, thoroughly and heartily agree.

Rock Ferry, Cheshire. January, 1908.



THE CAUSES OF INSANITY.

THE two principal causes, as will shortly be seen, are undoubtedly Heredity and Intemperance in Drink. In the case of men the latter is the prevailing factor, and with women it is

the former which plays the larger part.

According to the 60th Annual Report of the Commissioners in Lunacy, the average yearly number of persons who became insane, and were admitted to the various Asylums, Licensed Houses, etc., in England and Wales during the years 1900 to 1904, inclusive, was 21,298, of which number 10,445 were men and 10.853 women.* Of the men, 2,349, or 22.5 per cent. had, according to the return, become Insane through Intemperance in drink, whilst 2,001, or 19.2 per cent. owed their Insanity to Heredity. As regards the women Intemperance was assigned as a cause in only 998 cases, or 9.2 per cent. of the total, but Heredity accounted for the large number of 2,717, or 25 per cent.. Thus, either to drink or Heredity, 4,350 men every year, and 3,750 women, owe their Insanity, or, in other words, of the 21,298 persons who lose their reason annually and have to be transferred to Asylums no fewer than 8,065 have to thank their own bad habits of Drinking, or else the parents who brought them into the world.

And this is true not only of England and Wales, but of the

whole civilised world.

Thus Dr. S. A. Tucker, who in 1882 made a tour of inspection of all the principal asylums in Europe and America, travelling 140,000 miles, and visiting over 400 Asylums in various parts of the world, and afterwards embodying his researches in a deeply interesting and instructive work of over 1,500 pages, entitled "Lunacy in Many Lands," writes thus on the point: "Chief Causes of Insanity: —The chief causes of Insanity are recognised by the Superintendents, who have communicated with me, to be heredity, intemperance, general dissipation, and over-work, with insufficient or improper food. Many other causes are also assigned, and a variety of opinions expressed as to the obscurer causes of insanity, but in reference

^{*} Sixtieth Report of the Commissioners in Lunacy, pages 154 and 155. Published, June, 1906.

to the reports appended hereto, the foregoing will be found to be the chief causes. Of this number heredity, and intemperance or alcoholism, take the leading place, and perhaps it would not be unsafe to assume that in the majority of cases heredity insanity has its origin in alcoholism."

Whether this latter remark is correct or no will be a matter for future discussion, but his main statement confirms the verdict of the English Commissioners, and that is the reason I have quoted the paragraph. Heredity and alcoholism, then, being without a doubt the two chief causes of Insanity, let us now consider each of them a little more in detail, and first of all heredity.

THE INFLUENCE OF HEREDITY ON INSANITY.

What an important factor this is in the causation of Insanity, the statistics of the English Commissioners and Dr Tucker's testimony abundantly prove, no fewer than 4,718 cases annually being influenced by it. No one, indeed, is long connected with a lunatic asylum before the fact is forced prominently upon his notice. Sometimes he is struck by seeing in the same asylum two brothers or two sisters; at other times it is by seeing on "The Statement of Particulars," given with the patient when admitted, the words "father insane," "mother insane," "aunt insane," and so forth. Dr Strahan says: "I have seen a man whose mother was an imbecile, whose sister was an idiot, and who was little better himself, come to visit his wife and wife's sister—whose mother had also been insane—who were confined as lunatics in the same Asylum, where his idiot sister resided."

But there is no need to multiply examples. The facts are admitted, and everyone knows that what Dr Clouston says is true, namely, that "The facts of nature compel the physician to see that purely mental defects are transmissible from parent to child, and prepare him for the great fact that heredity plays in psychological development and in mental disease."*

But although we all know that the transmission of Insanity from parent to child is unfortunately continually taking place amongst us, comparatively few who admit the facts are aware of the precise explanation of them, and as a clear understanding of this will pave the way for, and render more intelligible what will hereafter be written under the heading of "Prevention," I here take leave to subjoin the following lucid

paragraph on this subject from the pen of Dr. Ira Van Gresen, and which I venture to call

The Explanation of the Influence of Heredity.

"In studying the egg-cell, just after it has started on its growth to produce a new member of the species, the biologist has found that equivalent and equal amounts of a certain element of the cell are derived from both the father and the mother. He has shown, furthermore, that these elements are, by a most intricate process, distributed in equal amounts to every cell in the whole body. It is on this ground that Huxley says the entire organism may be compared to a web, of which the warp is derived from the female and the woof from the male. We stand at last face to face with some intelligent and fact-supporting basis of the mechanism of heredity, and can now have some glimpse of how immutable are the laws of heredity."

It is thus seen how easily insane patients can transmit their infirmity to their offspring, and it is no wonder that Dr. Van Gesin adds, a few sentences later, "This subject of Heredity is of most enormous importance in the study of Insanity."

The next largest assortment of cases is ascribed to previous attacks of this disease.

"Previous Attacks" as Causes of Insanity.

These account for no fewer than 16 per cent of the men, and 22.3 per cent of the women, in other words, the lamentable fact is disclosed that every year 1,667 men reported as recovered relapse, and 2,421 women. Without dwelling upon this point, which, of course, everyone regrets, I cannot refrain from saying that the whole thing is in large measure only Heredity and Drink in another guise, for seeing that one or the other probably caused the previous attack, one or the other must also be thanked for this.

THE UNKNOWN CAUSES OF INSANITY.

These, according to the Commissioners Returns, account for 17.1 per cent. of the men, and 15.1 of the women. Now, to have to ascribe Insanity to causes unknown is very unsatisfactory, and yet is easily accounted for. In a very large number of these cases—probably in the majority—either Drink or Heredity is responsible, but the friends, on account of the stigma attached to the former, and a dislike to admit

the latter, conceal or deny the facts, and hence the cause is entered as "Unknown."

INTEMPERANCE AS A CAUSE OF INSANITY.

As we have seen, 2,349 men become insane every year through intemperance in drinking, and 998 women from the same cause.

That this agent should be responsible for so much insanity is not surprising, for seeing the terrible mischief it is capable of effecting in the other organs of the body, it would be strange indeed if that most delicate organ of all, the brain, should escape immune.

The wonder is that it does not more often destroy a person's brain and nerves than it does. Why it should so often hopelessly injure the stomach, kidneys, and liver before it ever seriously and permanently affects the brain is a difficult thing to understand, and it almost looks as if Providence was kind enough not to allow a man to kill himself with Drink without allowing him the capacity of knowing it, and therefore giving him the opportunity, if only wise enough to avail himself of it, to save himself from a drunkard's grave. It is not my intention here to describe how alcohol affects its destructive changes in other organs of the body, although, of course, this is thoroughly well known, but as to how the poison acts upon the brain and nervous system I consider it only right to give the fullest explanation.

HOW ALCOHOL CAUSES INSANITY.

That it does so we know. How it does so is not so well known, and as it is pertinent to our inquiry to thoroughly understand the point I here beg leave to quote freely from an address delivered by that eminent scientific observer and physiologist, Professor Victor Horsley. The address, indeed, is such a remarkable one that I take the liberty of reproducing it almost verbatim from the report which appeared at the time in the "British Medical Journal." ("British Medical Journal," May 5th, 1900.)

"Selective Action of Alcohol.

Mr Horsley said that it was his duty to present to them from the scientific standpoint a plain statement of the present state of knowledge as to the effect produced on the brain by small doses of alcohol. It probably was not generally known that all drugs had a selective action on the organs and tissues of the body, that is to say they effected by reason of their

chemical affinity some organs, or parts of organs, and spared others, and this was particularly true of alcohol. As Professor Ehrlich had pointed out, it was merely a question of chemical They must, therefore, first familiarise themselves with the various elements of the nervous system, which investigation had shown to be the commonest point of attack. The speaker proceeded to give a rapid survey of the central nervous system illustrating the subject by means of lantern slides. In considering the effect of small quantities of alcohol on the central nervous system it was necessary to discuss its effect on ideation, that is the intellectual thinking apparatus, next on the voluntary action apparatus, and then on the cerebellar apparatus for the regulation of movement and equilibration. The activity of the highest psychical centres of the brain was estimated in various ways. The activity of the brain in executing the decision of a thought arising from the stimulus of a special sense centre could be estimated either by measuring the time the brain took to do some small task allotted to it, first in the natural state, and secondly when under the influence of alcohol, or by estimating the amount of work done in a given time.

Increased Reaction Times.

The time occupied by the nervous system in observing and recording the simplest thing was called "the reaction time," and was so appreciable that in all minute and accurate records astronomers had to measure their reaction period and to account for it. The lecturer then demonstrated by an experiment the method of measuring the reaction time. This plan in all forms and varieties had been very largely employed by Professor Kraepelin, whose investigations had been so thorough and complete that they explained the somewhat contradictory results obtained by Warren and other observers, and had established on a thoroughly scientific basis the direct influence of alcohol on the higher centres of the brain. The effect was that very speedily, after taking the dose of alcohol, the reaction time was shortened, but this shortening, that is to say this apparent quickening of the cerebral act lasted only a few minutes, and then marked slowing set in, and for the rest of the time during which the alcohol acted, varying from two to four hours according to the individual, the cerebral The diminution was shown by a activity was diminished. noteworthy lengthening of the reaction period—in other words it took longer for a person who had a small quantity of alcohol to think.

Slowing of Other Mental Powers.

A further method employed by Kraepelin was to estimate the ability with which the addition of simple numbers was carried out, and also the learning by memory of twelve places of figures, and in all these tests the slowing of intellectual vigour was shown. In regard to the occasional acceleration observed at the commencement in some experiments Kraepelin made the remarkable personal observation that during this period of acceleration, that is during the first few minutes after taking a dose of alcohol, he had the subjective sensation that it was much easier to learn the figures, but when he came to examine the records he found that so far from having achieved his intellectual task more easily, it had, as a matter of fact, been accomplished more slowly. observation was confirmed also by two other investigators in the same laboratory on whom a smaller experiment was This was a striking instance of the deceptive effects of alcohol on the higher intellectual centres of the The effect of a poison like alcohol on the cerebral brain. centres for voluntary action was readily estimated, some voluntary muscular act was selected, and the amount of force evolved by the sensory motor cortex, and exhibited by the muscular contraction measured. The simplest experiment of the kind was one described by Kraepelin, in which he measured on himself and a colleague the force with which they could grasp the dynamometer at regular intervals during the hour or more that the experiment lasted. The result of the experiment was to show that though there might be at first a slight increase of the work put out, very soon a constant and marked failure in the work occurred. An interesting parallel series of experiments was made by the same observers under the influence of tea, the effect of which was to improve the output of physical work for a long time, and to avert to a certain degree the fall due to natural fatigue. Kraepelin had pointed out that though the primary accelerating effect of small doses of alcohol was frequently observed in simple reaction experiments, and in the experiments on the volitionary motor centres, it was not found in his complicated thoughtmeasuring experiments. In these only the hampering influence was shown. It was clear, therefore, that there was something peculiar about this apparent stimulation of the

nervous centres by alcohol, and the explanation might be that the first toxic effect of alcohol on nerve centres was the quicker liberation of motor impulses. Numerous investigators, Aitken amongst others, who had studied this point, had suggested—and indeed the greatest Continental authority, Professor Bunge had taught—that the action of the drug was from the very first an inhibitory or paralysing one. The primary or accelerating stage therefore, when it was observed, might, in accordance with these views, be considered to be due to the inhibition of the highest centres or the controlling apparatus which was known to exist in relation with motor centres; in fact, to use an ordinary analogy, every one recognised that directly the governor of an engine was prevented from acting, the machinery at once tended to race, and to work irregularly.

INFLUENCE OF THE CEREBELLUM ON THE REGULATION

OF MOVEMENT AND EQUILIBRATION.

The cerebellum was intimately connected with the cerebrum and it was known that injury to it was necessarily followed by the loss of the regulation, and control of movements, which was especially true of the muscles of the lower limbs. legs were most particularly associated with the cerebellum, and co-ordination in standing and walking depended on the normal action of the cerebellum. One of the further effects of alcohol taken in slightly larger doses was to destroy this special function of the cerebellum, and to produce a sensation of tremor and weakness in the lower limbs, so that the individual staggered slightly, and standing became a matter of difficulty. Any one who has observed slight alcoholic poisoning and compared it with the disordered equilibrium of a certain degree of disease of the cerebellum could not fail to note the close similarity of the two conditions, or hesitate to accept the view that alcohol particularly poisoned the cerebellum. According to the recent researches of Dr Risien Russel, the cerebellum played a part also under normal circumstances, damping the tremor accompanying the discharge of energy from a nerve centre. Hence, in alcoholic poisoning the exaggeration of the natural intermittent discharge of the nerve centres producing tremor might be due in part to the loss of the cerebellar controlling influence as well as to the affection of the cortical portions of the cere-In regard to the structural changes produced in nerve corpuscles by small doses of alcohol, it had to be remembered that with existing means of investigation it was not possible

to demonstrate such changes. The vital processes of the body were so delicate that it was not possible to show any change in the protoplasm of the nerve corpuscles corresponding to the physiological alterations referred to as produced by small doses of alcohol. It was therefore worth while to show the destructive effects produced by the continued use of The lecturer then demonstrated by means of lantern slides the disappearance under the influence of alcohol of the granular masses in the Purkinje nerve corpuscles, and how the protoplasm of the body of the corpuscle lost its characteristic structure, and the nucleus became altered in shape. toxic influence of chronic alcoholism on the pyramidal cells was also demonstrated in a similar manner, and the effect of alcoholic poisoning on the normal pigmentation nerve cells was illustrated by a slide representing degenerated nerve cells from the Archives of Neurology, edited by Dr. Mott, and published under the auspices of the London County Council."*

After this lucid and convincing explanation of the baneful effects of Alcohol upon the brain and nervous system, it ought not to be difficult to understand how alcohol causes Insanity, and hence although the above quotation has been lengthy, I have thought it right to give it fully, as I have seldom, if ever, seen any explanation at once so pithy, and yet so clear and intelligible. And here for the present I leave the subject of Alcohol as a cause of Insanity, to return to it again when discussing preventive measures in the second part of this work.

We have seen, then, that Heredity accounts for 19.2 per cent. of the men, and 25 per cent. of the women; and Drink for 22.5 per cent. of the men, and 9.2 per cent. of the women. And now we come to causes of insanity of an altogether different order, namely,

"OTHER BODILY DISEASES OR DISORDERS" AS CAUSES OF INSANITY.

The Commissioners do not say what these are, but they are credited after "Previous Attacks" with producing the next largest number of cases of insanity annually reported. Altogether they are said to be the cause of 1,487 men becoming insane every year, and 1,428 women.

Now, seeing that these returns exclude Uterine and Ovarian Disorders, and Venereal Diseases, Fevers, Sunstroke, etc.—all

^{*} British Medical Journal, May 5th, 1900.

of which are treated separately further on—there was a time when I should have thought these figures rather over-estimated the case, but seeing the large number of cases of Insanity in recent years, which have undoubtedly had their origin in Influenza, I think they are probably fairly correct. I am also certain that Heart-disease is a far more common cause of insanity than is generally supposed. According to Dr. Suckling also a new cause altogether will sometimes have to be put down as occasionally producing Insanity—I refer, I may say, to what is known as dropped or movable kidney (vide "Movable Kidney. A Cause of Insanity," by Dr. Whitwell in British Medical Journal for Sept. 22nd, 1900.)

OLD AGE AS A CAUSE OF INSANITY.

Every year 771 old men, and 040 old women, become insane. These figures, although fairly large, are not, I think, exaggerated. One strange thing too about this type of insanity is—and it is so strange that I cannot refrain from mentioning it here—that this is the one form of insanity in which Heredity, and perhaps Drink too, cannot in very many cases be properly blamed for any share in the process. The explanation of my belief is simple, and is, of course, this, namely, that if there is any hereditary tendency to insanity, or the person is intemperate, he almost certainly breaks down earlier. When, therefore, it does occur, it is probably owing to diseased heart or arteries, or, as Dr. Clouston puts it, "the after-effects of over-exertion or abnormal disturbance of brain function at former periods of life, which have left the convolutions weakened."

The next most frequent cause is given as Domestic Trouble, and this is said to include Loss of Relatives and Friends.

Domestic Trouble (Including Loss of Relatives and Friends) as a Cause of Insanity.

367 men and 942 women are said to become insane annually from this cause, and I have no doubt the figures are correct, for most of us know by personal experience what domestic troubles, especially the pain of a family bereavement means, and few indeed but can call to mind one or more of one's friends whose reason was not able to withstand the blow. As, moreover, "Adverse Circumstances" and "Worry" are each given a special place, I take it that it is to Domestic Bereavement as a cause that this heading specially refers, although it will, of course, include the cases which occur every

now and again where a person has domestic trouble in other ways, say through having a bad son, an erring daughter, a faithless wife, and so on.

MENTAL ANXIETY, WORRY, AND OVERWORK AS Causes of Insanity.

These causes are said to account for 568 men becoming

Insane every year, and 625 women.

And here it is worth noting that, excluding Domestic Trouble (including loss of relatives and friends) which, as has been seen, is a far more common cause of insanity in women than in men, and Adverse Circumstances (including business anxieties and pecuniary difficulties) which are far more common causes of Insanity in men than in women, the number of the two sexes who fall victims from the causes mentioned at the head of this section, are about equal. And this is only about what we should expect, for men and women get their anxieties pretty equally, although they are of a different character.

The next cause assigned in order of importance is given

CONGENITAL DEFECT ASCERTAINED.

This cause which explains the case of 6.2 per cent. of the males, and 4.1 of the females, requires a few words of explanation. It refers, of course, to those cases where the patients were born as idiots—either partial or complete—and were never anything else but abnormal beings. As to what proportion of the 652 males, and 444 females were complete idiots when born—that is to say never manifested any reason at all—and what proportion were only partially deficient, that is to say showed some intelligence but not much, the figures do not enlighten us. Neither, again, do they give us any information as to what was the cause of the congential Information on both points would be very instrucdefect. tive, and especially on the latter, as it would help to throw some light on the origin of the disease, which the bare statement alone does not, of course, do. Unfortunately, I am not in a position to speak authoritatively on the point, but if I were allowed to hazard an opinion, I should say that with the exception of those rare cases, where the head of the child was injured during child-birth, or the mother frightened during the critical time of pregnancy, most, if not all the other cases, would be found to be the offspring of parents where one or both were either insane, or of the insane temperament, or else

drunken or dissipated. And here it may be remarked that it is not necessary for a child's parents to be insane to beget an insane child—that they are drunkards, or have led a drunken,

dissipated life is often quite sufficient.

As Dr. Von Gresen, speaking of the transmission of Insanity from parent to child, says: "If a man exposes his germ plasm to the poisonous influences of alcohol, or, still worse, syphilis, such damage is not confined to his individual life only, but passes on to the next generation. This damage plays a part in subtracting from the full development of the organism especially in the most complicated tissue of the body, the nervous system."

There is no doubt about these facts, and therefore I believe no doubt of the further fact also, namely, that most of the cases of Insanity put down as due to "Congenital Defect Ascertained" are really due to Drink or Syphilis in the

parent.

ADVERSE CIRCUMSTANCES (INCLUDING BUSINESS ANXIETIES AND PECUNIARY DIFFICULTIES) AS A CAUSE OF INSANITY.

From this cause 603 men and 386 women are said to become insane every year. This is probably true, because business anxieties and pecuniary difficulties are such common occurrences at the present day when there is so much competition in the various trades and professions, and so many people find it difficult to pay their rates and taxes and other expenses, and generally to make two ends meet. Indeed, the strange thing is that a great many more people do not break down mentally from this cause seeing the calls these things make upon the brain. Healthily constituted persons may stand against adverse circumstances for many years without giving way, but if no relief comes, even the strongest brain is almost bound eventually to give way, much less the brain of one in whom there is an hereditary tendency to the disease, and who, to drown his trouble, has perhaps made matters worse by poisoning his brain with alcohol.

CHANGE OF LIFE AS A CAUSE OF INSANITY.

From this cause it is calculated that about 484 women become insane annually. This change generally comes on between 45 and 50 years of age, and the mind may give way a year or two before, a year or two after, or at the time

In nearly all women great changes occur at this time, but they are generally harmless, nervous symptoms, such as giddiness in the head, flushing of heat over the body, or uneasy sensations. These generally last for a year or two, and the woman's sanity is at no time threatened. When insanity occurs the usual symptoms are often absent, or, as Dr. Clouston says—"one seems to come instead of the other." The type of Insanity is in most of the cases of a melancholic form, and sub-acute in character. There are generally morbid fears, loss of self control, loss of affection for husband and children, often replaced by marks of aversion, and frequently, indeed, a strong suicidal impulse.

It is a form of insanity fairly hopeful as regards prognosis, more than half, according to Dr. Clouston, recovering if below

50, but over 60 the prognosis is not nearly so good.

The next most frequent cause of Insanity is

PARTURITION AND THE PUERPERAL STATE AS CAUSES OF INSANITY.

From these causes 576 women are said to become insane annually. Thus, as far as women are concerned, it is a very common cause of insanity, and it is believed that one in every 400 labours is followed by it. "The cause of the disease," says Dr. Clouston, "is definite and clear. The accompaniments of child-birth produce it, the great physiological cataclysm itself, the pains of labour, the excitement mental and bodily, the exhaustion, the loss of blood, the open blood vessels liable to absorb every septic particle, the sudden diversion of the stream of vital energy from the womb to the mammae, these, together or separately, are the causes that, acting on an unstable brain hereditarily predisposed, set up one of the most violent mental storms that the physician has ever to treat." (Clouston's Mental Diseases, page 502.)

No doubt in a good many of the cases there is an hereditary tendency to the disease, and here I again quote Dr. Clouston. "The ordinary causes of mental disease contribute as predisposing causes towards puerperal insanity. Poverty and want of proper attention during child-birth, and having to get out of bed and to work too soon, I have seen bring it on. The shame and mental distress usually attending the birth of illegitimate children make it twice as common then as after the birth of legitimate children. I have several times seen a sudden mental shock act as the proximate cause of the

disease in women who seemed to be doing well in childbed. I once saw the news of the death of the patient's father send a woman, in the second week of confinement, into acute mania within a few hours. But such moral or other causes are not at all necessary to produce the disease over and above the puerperal condition. In by far the majority of the cases there is no other cause. It occurs in ladies with every comfort and attendance as well as among the poor." (Ibid, page 504.)

VENEREAL DISEASE AS A CAUSE OF INSANITY.

This accounts for 467, or 4.5 per cent. of the number of male insane, and 92, or 8 per cent. of the female insane. The form of Insanity that it is supposed most commonly to generate is that fatal and incurable form known as General Paralysis. This form of Insanity accounts for the mental breakdown of 1,160 men annually, or more than 11 per cent. of the total number of males who become insane (Commissioners' Tables, page 152, table 21), and the best observers are now practically agreed that although alcohol and syphilis together are at the bottom of most of the cases, yet that syphilis is a far more important factor than used to be thought the case. Some, indeed, go so far as to say that if there were no Syphilis there would be very little General Paralysis. (Dr. P. Smith, British Medical Journal, August 11, 1900.) But, as I have said, it is not only General Paralysis that is caused by venereal disease, but there is another special variety of Insanity due to this cause, and this cause alone, which Dr. Clouston describes under the heading of "Syphilits Insanity," which is very incurable, and in which the commonest pathological changes noticed are a thickening of the coats of the arteries, causing narrowing and obliteration of their lumina, with serious and extensive degeneration of the brain in consequence.

ACCIDENT OR INJURY AS A CAUSE OF INSANITY.

This cause is said to account for the insanity of 448 males annually, and 85 females.

Naturally the males figure in larger proportion than the females, as the former, being employed in mechanical and dangerous pursuits are more exposed to accidents than the other sex, whose occupation is seldom so dangerous. Blows on the head, falls, gun-shot injuries of the brain, are, I take it, included under this heading, and also accidents to other parts of the body, for, according to Dr. Clouston, the

number of cases of Insanity arising from injury to the head even including sunstroke, does not amount to more than one third per cent. of the admissions. If the figures above are correct also they must include injury to the head at child-birth, real or supposed injuries recovered from, e.g., such as result from children being dropped by their nurses, in infancy; and falls of boys from bicycles, high walls, etc., would, of course, be included.

And now, according to the Commissioners' Returns, the principal causes of Insanity have been discussed, for all the causes yet about to be mentioned furnish but a very small proportion of the annual contributions to Insanity. As, however, some of these are more important than the statistics appear to indicate, I will continue to deal with them as I have dealt with the others, namely, make a few pertinent remarks about each.

RELIGIOUS EXCITEMENT AS A CAUSE OF INSANITY.

This, according to the Commissioners' Returns, accounts for 123 men becoming insane annually, and 176 women, or 1.2 and 1.6 per cent. respectively of the whole. This not improbably is somewhere near the truth, although it is to be hoped that religion is not blamed, unless one is quite sure that religion is really the cause, as religion sometimes appears to be the cause when it is really not so, as in the case of a young woman I well remember, where, though the insanity took a distinctly religious turn, the real cause, it afterwards transpired, was Fright. Indeed, one eminent alienist says in his work on Insanity that religion would never produce Insanity unless there were already existing some natural tendency to it, and during the great religious revival in Wales a year or two ago one or two Welsh asylum superintendents testified to the remarkably few cases which were sent to them which could be traced to this cause alone, one of them, indeed. going so far as to say that "a proper conception of religious truth and an honest and consistent effort to use its teachings is our guide in everyday life and duties, give stability and strength to the mental powers, and enable many to resist the effects of even a strong inherited tendency to which they would otherwise succumb.

PUBERTY AS A CAUSE OF INSANITY.

This is assigned as the reason for 142 males becoming

insane annually, and 151 females, and I do not think that the figures are exaggerated. Dr. Clouston, indeed, says: "Puberty is the first really dangerous period in the life of both sexes as regards the occurrence of Insanity." blames, however, not so much puberty itself as the forcing system which is too often adopted in the education of children, and he aptly illustrates his meaning and the force of his contention after the following fashion:- "Man cannot add a cubit to his stature. The blacksmith's arm will not grow larger by twenty years of daily exercise after it has once attained a certain size. The possible extent of development of every brain, and of every function in any one brain is just as much confined by limitations as the size of the blacksmith's arm, and physiology teaches us that no organ or function should be worked even up to its full limit of power. prudent engineer sets his safety-valve just at the point above which the boiler will burst, and no good architect puts weight on his beam just up to the calculation above which it will break. Nature generally provides infinitely more reserve power than the most cautious engineer or architect. She scatters seeds in millions for hundreds to grow, and she is prodigal of material and strength in the heart and arteries beyond what is needed to force the blood-current along; therefore we have no reason to think that any function of the brain should be strained up to its full capacity except on extreme emergencies. Especially do these principles apply if we have transmitted weaknesses in any function or part of the organ; and what child is born in a civilised country without inherited brain weakness of some sort or in some degree?" (Clouston's Mental Diseases, p. 535.)

Over pressure alone, however, is, I am sure, not entirely accountable for the case of all the young men and women who break down mentally at this period, and whose insanity is ascribed to the changes which occur then, for I am certain that amongst the causes the first I have dealt with, namely Heredity, has a good deal to do with it.

FRIGHT AND NERVOUS SHOCK AS CAUSES OF INSANITY.

78 males, and 182 females annually are credited with owing their Insanity to these causes. I think the figures are probably pretty correct, indeed, if anything, I think they must be under the mark rather than over it. Especially, too, is this likely to be the case if we bear in mind the number of people who, as children, are frightened in fun by their nurses, about which the parents probably know nothing, and the effects of which

very likely do not show themselves at the time, and when later on the dire effects do show themselves the real cause escapes notice. The effect of Fright upon adults in producing Insanity is well known, and I suppose no cause is capable of so suddenly producing this malady as this one. Again, as regards Nervous Shock, the effect of the sudden receipt of bad news is so well known as to need no word from me as to how such a thing can unhinge the mind.

Love Affairs (Including Seduction) as a Cause of Insanity.

This is said to account for 53 men becoming insane every year, and 201 women. This is probably very near the mark, for disappointed love, by the grief it induces, so severely tries the brain that anyone even with no hereditary tendency is The large preponderance of females very apt to be upset. over males is not surprising when we remember for one thing that the affections of women are more often trifled with than those of men, and another thing, that their affections are, as a rule, deeper, and once they have been set upon an object, do not disengage themselves so easily from it. Again, men, as a rule, have to work, and this helps considerably to shake off the trouble, whilst women, on the other hand, are too often at home, either doing nothing or else engaged in duties which do not employ the mind sufficiently. Thus, whilst quite as many of the two sexes may, and possibly have been, disappointed in love, fewer men lose their mental balance through it than do women. Then, again, Seduction, which is naturally a most potent cause of loss of mental balance in a woman, by reason of the grief, shame and social ostracism which it brings in its train, helps no doubt largely to explain the considerable preponderance of females over males in the figures put down to the cause designated "Love Affairs."

SEXUAL SELF-ABUSE AS A CAUSE OF INSANITY.

This, according to the English Commissioners' Figures, accounts for the insanity of 234 persons annually, and by far the larger number of them are young men. Considering the extent to which this unnatural habit is indulged in, and its pernicious effects upon the brain and nervous system it is a matter for surprise that a far larger number of persons do not become insane annually from this cause than appears to be

the case. The subject, however, is such a appellent one that I will say nothing more about it here but what I feel I must say, and ought to be said, I will reserve for the second part of this treatise.

FEVERS AS CAUSES OF INSANITY.

This accounts for 200 cases annually, 130 being males, and 70 females. My own experience, however, causes me to think that these figures must be exaggerated, for, in the course of a long and extensive practice as a general practitioner, in which I have had hundreds of fever cases under my care, I cannot call to mind a single case in which this result followed. I am inclined, therefore, to think that the two conditions, if not actually antagonistic, do not so frequently favour one another. Delusion, of course, is a common accompaniment of fever, and in Typhoid or Typhus it often continues for a considerable time, but delusion is not necessarily insanity. I have no doubt that the Commissioners have given their figures as a result of the returns made to them by the Superintendents of the various asylums, and there is no doubt that the Superintendents have had these reasons assigned to them by the friends as the cause in every given case, but, as the asylum superintendent does not usually see the cases in the primary illness, and perhaps for many years afterwards, because the friends say and think so it does not necessarily mean that their opinion is correct, and hence I say again that in my opinion Fevers do not play such a substantial part—even modest though that part is compared to others--in the causation of Insanity as the figures above given would lead us to suppose.

PRIVATION AND STARVATION AS CAUSES OF INSANITY.

According to Dr. Tucker's testimony, based upon the reports of various Superintendents of asylums all over Europe and America, these two are amongst the commonest causes of Insanity, but, taking the case of Insanity in England, according to the English Commissioners' figures, only 101 men, and 91 women become insane every year from them.

In foreign countries, where the provision for the poor is not so good, naturally more people break down through them. The immediate cause of the breakdown is, of course, owing to the poor state of the blood which exists in those who do not get proper food, and also the feeble action of the heart that results from the same cause. A pure and good, as we'l

as regular supply of blood is necessary if the brain is to keep healthy—so vascular, indeed, is the grey matter of the brain that capillaries for almost half of it (Clouston, page 465)—so that, from want of food, long continued fatigue, and other causes, the blood becomes impoverished, or is sent to that organ in insufficient quantity, the brain naturally suffers, and if this state of things is long continued, and especially if there is any hereditary tendency to insanity, the person ultimately becomes Insane.

SUNSTROKE AS A CAUSE OF INSANITY.

This is said to account for 138 cases annually, of which number 129 are males.

That there should be fewer females than males is only what might have been expected, but whilst the statistics may be correct—for the heat of the sun can, of course, so injuriously affect the brain as to cause insanity—I think the figures as to the males possibly over-estimate the real truth.

On this point Dr. Clouston says:—"No doubt sunstroke gets the credit for far more insanity than it produces. Few Britons become insane in hot climates where that cause is not assigned." I quite agree with him, and am of opinion that some of the cases put down to sunstroke as a cause would probably be more correctly classified if put down as due to Alcohol or Heredity, one or the other—perhaps both.

SEXUAL INTEMPERANCE.

This is said to account for 138 cases annually. I have no doubt it does. It is Nature's punishment for excess, and those who break Nature's laws must be prepared to pay the penalty. It is, however, a delicate subject to dilate upon, so I shall say no more about it in this place.

LACTATION AS A CAUSE OF INSANITY.

The period of nursing a child is, with women, necessarily a trying one, and hence it is little wonder that 127 cases annually have to be set down to this cause. The poor are far more liable to it than the rich, and especially those who have had many children. The immediate cause of it appears to be exhaustion, induced by too-long-continued suckling in women who probably have had bad or insufficient food, and the result is naturally an anaemic irritable state of the brain. The type of insanity is sometimes Melancholic, sometimes Mania with special tendency towards suicide.

In nearly half the cases there is an hereditary tendency, but the Insanity so induced is a very curable form, provided the nursing is stopped, and plenty of nourishment given.

PREGNANCY AS A CAUSE OF INSANITY.

From this cause 113 women become insane annually, or 1 per cent. of the total number of admissions to asylums amongst females is ascribed to this cause. The probability is that the real number of those who become insane from this cause is somewhat larger than these figures indicate for on account of the stigma which would attach itself to a child if born in an asylum there is a natural reluctance to send such cases to these institutions. Thus, it is only the cases of the poor and not over well-to-do which are probably accounted for by the above figures, and as even a poor man will not expose his offspring to such a stigma if he can possibly help it, the result is that it is probably only the worst type which are sent to institutions at all. And this, no doubt, is one reason of the recovery rate of this form of Insanity being so unsatisfactory compared with the rate of recoveries in the other insanities special to women, namely, the insanities of childbed, nursing, etc.

According to Dr. Clouston, women are far more liable to break down mentally during their first pregnancy than during the subsequent ones, and as five of the fifteen cases which came under his notice were the mothers of illegitimate children, he comes to the conclusion that moral cases probably influence the accession of the malady. (Clouston, page 529.) This is probably the case, for unmarried women about to become mothers are too often abandoned by relatives and friends, and such persons would naturally fall easier victims than those whose circumstances were happier.

OVER EXERTION AS A CAUSE OF INSANITY.

This is said to account for 50 men becoming insane annually, and 23 women. The term "Over Exertion" refers, of course to physical "Over Exertion," for if mental over exertion were intended the number of cases would obviously be infinitely more. But whilst hardly anything is more likely to upset the stability of a brain—especially if hereditarily predisposed to insanity—than mental over-exertion, it is far more difficult to account for physical over-exertion producing this

When it does so it must be by manual labour being prolonged to an inordinate length-food being the while forgotten or neglected—by the existence, in fact, of conditions similar to those which used to obtain in some factories and warehouses before the introduction of the Factory Act. It may also be produced in some cases by persons voluntarily over-working themselves when they do what is called "piecework" at factories, also by over-exertion and too long hours on railways and so forth, thus not allowing themselves sufficient time for food or sleep. Whether, however, physical over-exertion alone, unless accompanied by insufficient sleep and deficiency of food would in a healthy brain induce insanity is a moot point, and I have little doubt that at all events most of the cases in which it does so are those in which there is an hereditary tendency, and, therefore, cases in which any cause, even the slightest, would excite a mental break-down.

Uterine and Ovarian Disorders as Causes of Insanity.

These causes are said to account for the insanity annually of 53 Women, or only 5 per cent. of the whole, but I am sure that it accounts for a good deal more. Probably not 5 but 5 per cent would be nearer the mark. At all events, seeing that Change of Life—that change which corresponds to the cessation of the child-bearing period-is admitted to account for nearly 500 cases annually—a striking proof of the cessation of function in certain organs affecting the mind—it is very strange that so few are set down to the causes at the head of this chapter. Not only so, but it is difficult to reconcile the figures with the statements of the most distinguished physicians and writers in this specialty. Thus Dr. Bucknill says—"There can be no doubt that uterine disorders constitute one of the most frequent remote causes of Insanity in Women." Dr. Blandford says:—"The sympathetic connection existing between the brain and the uterus is plainly seen by the most casual observer," and Dr. Mandeley says: -" Affections of the uterus and its appendages afford notable examples of a powerful sympathetic action upon the brain, and not unfrequently play an important part in the production of Insanity, especially of Melancholia." (Tucker's Lunacy The fact, indeed, is so well in Many Lands, page 41.) recognised by physicians that the question has been seriously raised as to whether every woman admitted to an asylum

should not have these organs carefully examined, and lady doctors have been advocated for this reason. The subject is one for serious discussion, for whilst some divergence of opinion may exist as to the wisdom or otherwise of too much meddling. there can be no question as to the importance or the integrity of function of these organs to the preservation of women's sanity. In any case, if bodily diseases cause insanity at all I am sure that disorders of these organs—excluding actual primary disease in the brain itself, or produced by Alcohol or Heredity—cause more insanity than any other disorders, and the only way I can account for "Other Bodily Disorders," socalled, being credited in the Commissioners' Returns with 2,915 cases in women annually, and Disease of the Uterus and Ovaries with only 53 is by assuming that the Superintendents, in making their returns, must, in numerous cases, have been thinking of this latter class as being amongst the former, and including them in that category accordingly.

OTHER ASCERTAINED CAUSES OF INSANITY.

The proper sequence of this section should have been immediately after Love Affairs, for to "Other Ascertained Causes" are credited a larger number of cases of Insanity than any which I have discussed since. The title, however, is such a peculiar one that I thought I could better discuss this section away from the rest, and I have therefore left it till the last.

According to the Commissioners' Returns, to these causes must be ascribed the Insanity of 118 men annually, and 129 women, or 247 persons altogether. The number is not very large, but many, I am sure, would like to know what the causes which are said to be "ascertained," and yet are not given, are. It is, I may say, not idle curiosity that suggests the inquiry, but a genuine desire to have the fullest information, for, without it, it is, needless to say, impossible to do my subject the justice it deserves.*

CAUSATIVE INFLUENCES OF INSANITY.

And now having considered seriatim the assigned causes of insanity as found in the Commissioners' Reports, it will be

^{*} I have since ascertained, from a conversation with one or two asylum superintendents, that the cases put down under this heading are such as are supposed to owe their insanity to the following:--Lead-poisoning, Asphyxia (from gas), Morphia, and Drug-taking of all kinds, Match-making (from Phosphorus).

profitable to discuss a few factors, which, although not properly causes of Insanity, have, nevertheless, an important bearing upon the malady—I refer, I may say, to such points as Sex, Marriage, Occupation, and so forth. Taking each of these separately, we will endeavour to ascertain what their influence is, that is to say whether favourable or unfavourable, as regards the malady we are discussing.

THE INFLUENCE OF AGE ON INSANITY.

Esquirol held the view that the liability to Insanity once a child's age was reached progressively increased. This, however, is only partly true, as the following table, extracted from the English Commissioners' Report, will show (Commissioners' Report for 1906):—

$\mathbf{Age}.$		Male.	Female.	Total.
Under 15		162	104	266
15 to 19	•••	501	474	975
20 to 24		96 <i>7</i>	961	1,928
25 to 34	• • •	2,286	2,455	4,74 I
35 to 44	• • •	2,367	2,380	4,747
45 to 54	• • •	1,821	2,013	3,834
55 to 64	• • •	1,268	1,287	2,555
65 and upwa	ards	1,074	1,1 <i>7</i> 8	2,252

I deem it right to mention that the Commissioners do not include in this table cases of Congenital Insanity, that is of those actually born as idiots.

From the above table it will be seen that most cases occur between the ages of 35 and 44. It is next most prevalent from 25 to 34, at which period of life 4,741 cases occur annually. From 45 to 54 the annual average is 3,834 cases; from 55 to 64 the cases number 2,555; and from 65 and upwards, 2,252.

From 20 to 24 the average number of cases only number 1,928, from 15 to 19, only 975, and under 15 only 266 cases. Thus the age at which people are most liable to insanity is from 35 to 44, or really from 25 to 44, for the cases from 25 to 34 are practically as numerous as from 35 to 44. From 45 to 54 there is perceptibly less tendency, which gets less still up to 65, and declines a little further as age advances afterwards.

From 20 to 24 the liability to insanity is not half as great as it is after 25; from 15 to 19 it is only slightly over half as great as it is from 20 to 24, whilst under 15 its occurrence is very rare indeed.

These figures, taken from the Commissioners' Returns, are very much what might have been expected. From 25 to 44, when the greatest liability appears to exist, is just the age when men and women, as a rule, have the greatest strain upon them, when men have to enter into the fierce competition of life, and women are subject to all the dangers of pregnancy, child-birth, and lactation.

The steady decline of cases from 55 upwards may surprise some, but when it is remembered that at this age a large number of men have fought the battle of life successfully, and women have passed all the dangers and risks connected with maternity and change of life, the surprise no longer exists. These figures, too, should be comforting reading to those who are nervous on this point, for, as one writer has well said, "to those who have attained to mature age, and who are actually engaged in the duties of social and civil life, it would have been a painful reflection, were it true, that the longer men live the more obnoxious are they becoming to the greatest of all personal calamities,, and the more liable are their families and dependants, by such means, to be deprived of their care and protection." (Hood's Statistics of Insanity, page 10.)

Another observation by the same writer is also well worthy of note. "Any conclusion," he says, "upon this subject, in order to be absolutely correct, ought to be obtained from the number of cases admitted for the first time, for, as Dr. Thurnham writes, "the influence which age may exert may be perfectly insignificant compared with the constitutional tendency to relapse which remains after a first attack." (Hood's Statistics of Insanity, page 19.)

THE INFLUENCE OF SEX ON INSANITY.

It was at one time thought by Esquirol and others that women were a little more liable to Insanity than men, and, according to the Commissioners' Returns, judging by the number of cases occurring, this would appear to be true, for of the 21,298 persons who become insane annually 10,853 are women, and only 10,445 men. (Blue Book, page 147.) In considering this matter, however, the question of the relative proportion of the two sexes in the population must be

taken into account, and as, according to the last census, there were in England and Wales only 15,728,613 males, and 16,799,230 females, this difference of nearly a million alters the whole aspect of the case. The result is that whilst it is quite true that a few more women become insane annually than men (408 is the number), and therefore give the impression of their greater liability to the disease—when the preponderance of the sex in the population is considered the facts hardly justify this, the real truth being that whilst 6.6 per 10,000 of the general male population become insane annually, only 6.5 per 10,000 of the female population does so. It is quite true that the number of females under care in our Asylums largely exceed that of the males, but this, as the Commissioners' point out, is owing to the fact that they have a smaller death rate than the male insane.

The fact is, then, that women are not quite so liable as a sex to Insanity as men are. As to their particular liability at certain ages, it seems to be much the same with the two sexes, the only difference worth noting being that whilst with men the liability is greatest between 35 and 44, with women it appears to be between 25 and 34. (Vide Commissioners' table page 46.)

THE INFLUENCE OF MARRIAGE ON INSANITY.

Although more married persons are certified insane and admitted to Asylums every year than unmarried (out of the 21,298 cases admitted annually into Asylums and Licensed Houses, those in single charge and outdoor paupers not included, 9,263 are returned as married, 2,681 as widowed, and only 9,236 as single) thus giving the impression that married persons are more liable to Insanity than the unmarried, the real truth is just the other way, and instead of the married state conducing to insanity, its effect, as will presently be shown, is just the reverse. The explanation, of course, is this: to ascertain correctly the effect of Marriage we must take the figures, not of the whole population of 32 millions, of whom 13 millions are under 20 years of age, but only of the $18\frac{1}{3}$ millions who are above this age. Of these over II millions are married, and only a little over 5½ millions are single. Taking these figures as our basis, we can now see why, although a few more married persons become insane annually than those who have never been married, thus giving the impression that marriage conduces to insanity, when the

number of people at marriageable ages are considered the reverse is the case. All this is proved very strikingly by a reference to Table xvii., appendix A. of the Commissioners' Report, which clearly shows that at the marriageable ages, namely from 20 upwards, judged by the average number of admissions to Asylums and Licensed Houses, the proportion of the single admitted to the married admitted, calculated according to their respective proportions in the general population, was almost incredibly high.

Thus from 20 to 24 it was more than double as great; from 25 to 34 it was nearly treble as great; from 35 to 44, again, nearly three times as great; from 45 to 54 almost as much; from 55 to 64, considerably more than double; and from 65 upwards, nearly double. And here it is interesting to notice that the fact of marriage seems to act favourably even when the marriage state itself has been dissolved, for even the widowed figure far more favourably than those who have never been married at all.

Thus, whilst the proportion in every 10,000 of the single population, who at the age of 20 to 24 become insane is 7.0, with the widowed it is only 5.3; from 25 to 34 the respective ratios are for the single 15.5, but for the widowed only 9.8; from 35 to 44 with the single the ratio is 24.4, whilst with the widowed it is only 15.3; from 45 to 54 the ratio of the single is 27.2, and the widowed only 16.0; from 55 to 64, single, 24.4, widowed only 14.6; from 65 and upwards the figures for the single are 22.4, and those for the widowed only 14.8. (Blue Book, page 147.) And this, too, in spite of the fact that with the widowed there was the additional possible exciting cause of Insanity, which for the single had no existence, namely, grief at the loss of their spouses!

All this clearly proves that the influence of Marriage as regards Insanity is a distinctly favourable influence, and it is not difficult to see why it is so. As regards men, it is certainly not difficult to see why it is so, for, as Dr. Pritchard says in his treatise on Insanity—"We must take into our calculation that married persons lead in general more regular lives in all respects than the unmarried—that they are for the most part more fixed in their pursuits and in their condition as to maintenance and employment, and that they are in a less degree subjected to causes which agitate the mind and excite strong emotions." (Hood's Statistics, page 29). This is true we know as regards men, but is marriage as favourable in this respect to women?

Referring to the Commissioners' tables, we find that up to the age of 35 marriage is decidedly more favourable to men than to women.* From that age to 54 it seems to act as favourably as with men, but from 55 upwards, more favourably than with men.† No doubt the better position of the men from 20 to 35 is largely influenced by the fact that with married women this is a critical age on account of the frequency of child-birth, and its attendant dangers to the mental health.

As to the cause of the greater liability of single people from 19 to 20 upwards to insanity than their married brothers and sisters, in the case of the women I believe that disappointment in love is an important element, whilst another element, I am sure, is the fact that by refusing marriage, which it has been proved nearly every woman has at least once during her life the opportunity of doing, such conduct betrays per se at least an eccentric, if not an unstable mind, and ergo one distinctly liable to insanity.

I recognise, of course, that if this last point is admitted it lessens somewhat the highly favourable influence which, according to the Commissioners' figures, marriage appears to exert, but the other testimony is so overwhelming that this little deduction can easily be made without appreciably affect-

ing its value.

And now just a word or two in conclusion as regards the distinctly favourable influence which marriage appears to have as regards men. I have already given a few reasons why married men are so much less liable to insanity than the unmarried. Now a reason why unmarried men are so much more liable than married. Dr. Pritchard puts the whole question in a nutshell when he pertinently asks: "Is it through the restraints which the condition of celibacy imparts, or through the vices to which unmarried persons are more frequently abandoned?"

Esquirol is of opinion that where one case of insanity arises from the former cause a hundred results from the latter. And here, I may add, I quite agree with him.

^{*} Married women at all ages from 19 upwards, with the exception of the age of 20 to 24, come out twice as well as their unmarried sisters, and this in spite of their liability to the insanities connected with childbearing.

[†] Sixtieth Report of the Commissioners in Lunacy, Table of Yearly Averages, page 146.

THE INFLUENCE OF OCCUPATION ON INSANITY.

The Commissioners' Returns used to include a series of tables dealing with the former occupations of those admitted to our asylums each year suffering from insanity, and by a reference to these it was possible to ascertain approximately the extent to which the members of most of the trades and professions were liable to be affected by the disease. tables, first drawn up, I believe, in 1880, were continued regularly every year till 1902, after which they no longer appeared. Now, for my own part, I consider the discontinuance of the above tables very much to be regretted, for although not altogether reliable, not quite complete, and also open to objection on account of the way in which many of the "occupations" were grouped, yet with a little improvement they might be made most valuable. The writer, indeed, went into the subject some years ago, and despite the imperfect information given, found sufficient data on which to found some very practical observations. Thus, as regards the three learned professions, the Church, the Bar, and Medicine (inphysicians, surgeons, and general practitioners), doctors as we should expect, being exposed as they are to constant wear and tear, physical as well as mental, are most prone to the disease, and he found that no fewer than 16.9 per 10,000 became insane annually. Barristers (including lawyers and attorneys) came next with a ratio of 13 per 10,000, whilst clergymen came last with only a ratio of 11'1 per 10,000. (This, however, only includes clergymen of the Church of England.) No doubt the quiet and regular lives led by the last-named have a good deal to do with the favourable position in which they stand, most of them being in no fear of losing their annual income if well, even if that income be small, and being fairly well assured of being taken care of when indigent. They are also subject, as a rule, to nothing like the mental and bodily fatigue to which are medical men; whilst, as regards the Bar, although the profession is exacting mentally, a large number of barristers are not engaged in active practice at all, and the bodily fatigue to which such are subjected is very little. Again, it was noticeable that the highest rate of all was amongst the class grouped as hucksters, costermongers, hawkers, and pedlars, the ratio being as high as 25.2 per 10,000 among the males, and 37.5 among the females. The causes which account for this are probably excessive poverty for one thing, but more still in all likelihood the

frequently drunken and dissolute lives led by these people, whilst in the case of the hawkers and pedlars, loss of sleep may be an influencing factor, many of these people probably often sleeping out, and sometimes only having a few hours' rest at most. As regards the lowest rate, this appeared to be, as far as males were concerned, amongst Government workmen, messengers, and others (excluding Telegraph service), where the ratio is as low as 3 per 10,000, whilst among the females the lowest proportion was with those engaged in the ordinary branches of the Civil Service, where the ratio was only 1.1 per ten thousand.

This, it may be said, excludes the Telegraph and Telephone branches of the service, in which, as might be expected, on account of the noise and clatter of the instruments trying the brain rather severely, the ratio was much higher, namely, 11.6 per 10,000, whilst, strange to say, this does not seem to affect men so much, the rate in their cases being only 5.1 per 10,000. In other branches of the Civil Service in which women are so immune, men are particularly liable, the rate being, as regards the male population, the second highest of all in the Table, namely 17.3 per 10,000.

The next highest affected, he found—excluding the learned professions already discussed—were Commercial Travellers. where the ratio was 15.7 per 10,000. Other commonly affected classes among the male sex were wool-staplers and cloth workers (15.6), chimney sweepers and coal merchants (14.2), Tobacconists and Tobacco and Snuff makers (13.8), Musicians and Teachers of Music (13.3), Seamen (merchant service) (13.2), Chemists and Druggists (13.1), Goldsmiths, Silversmiths and Jewellers (13.2), Railway Engine Drivers and Stokers (11.7), Hair workers, Ivory makers, Basket makers and similar trades (11.6), Drapers, Hosiers, and similar trades. (11.3), Inn-keepers and hotel-keepers (11.2), Hotel servants (11'1), Trainers of horses, horse proprietors, and livery stablekeepers (109), Glass makers, Leather workers, etc. (109), Hairdressers and Wigmakers (10.8), Soldiers (non-commissioned officers and privates) (10.8), Book-keepers, Clerks (10.6), Sawyers, Thatchers, Sack-case makers, Etc. (10.6), Tailors (101), Shoemakers and Bootmakers (97), Fishermen and Fisherwomen, Bargemen, and Boatmen and Inland Navigation Service (without steam) (9'1), Carpenters, Joiners. etc. (8.7), Actors, Conjurers, etc. (8.7), Bakers, Confectioners, and Pastry Cooks (8.6), Dissenting Ministers, Roman Catholic

Priests, Missionaries (8.5), Law Clerks and Law Students (8.4), Bookbinders, printers, etc. (8.4), Wine and Spirit Merchants and Agents (8.1), Police and Prison Officers (8.0), Engine and Machine makers, Blacksmiths, Coppersmiths, Workers in Iron, Tin, Lead, etc. (7.8), Farm servants engaged indoors, not domestic servants (7.4), Coal heavers and labourers (not in mines), workers in gas works and water works (7.3), Laundry keepers, washing and bathing service (7.3), Teachers, Schoolmasters, Professors and Lecturers (6.9), Architects, Surveyors and Builders (6.6), Mat Makers & Sellers, hemp and jute workers (6.6), Harbour and Dock Service, dock labourers, etc. (6.5), Silk, Satin, and Crape Travellers (6.1), Carmen, Carters, draymen and Hauliers (6'1), Booksellers, Publishers, Librarians, etc. (5'8), Paper makers (5'8), Woollen, Flannel, Carpet makers and Workers (5.8), Earthenware, China, Glass, and Tobaccopipe manufacturers (5.8), Sheriff's Officers, Toll-collectors, etc. (5.7), Railway labourers, platelayers, navvies (5.6), Coal merchants and dealers (5.6), Clay and Sand labourers, Brick and Tile makers (5.5), Wheelrights, Coachmakers, Boat-builders, etc. (5.4), Corn, Flour and Meal merchants, Maltsters, Brewers, Hay and Straw and Chaff-cutters (5'3), Railway, Telegraph, and Telephone Service (not including engine-drivers or stokers), Railway Officials, Clerks, Stationmasters, etc. (5'1), Shepherds, Gamekeepers, etc. (5'0), Farmers and Graziers (farmers sons, daughters, grandsons, brothers, nephews, nieces, where these live with the farmer) (4'9), Miners, coal, iron, tin, and lead miners, etc. (4'9), Male Milliners, Dressmakers, Shirtmakers, Accoutrement makers (4.5), Cotton and Flax and Muslin workers and makers (3.8).

As regards the effect of the same occupation upon the two sexes, there is not very much difference in most of them, but in some of them there is. The most striking instance of all is that of the Civil Service, where 17.3 per 10,000 of the male members become insane annually, and 1'2 of the women. The reason of this disparity is, I think, not difficult to find. Under this heading are included not only the English branches, but the Indian and Colonial branches, and as very few women are, I presume, sent abroad, the hot climate and drinking habits customary amongst Englishmen abroad will probably explain the whole thing.

As regards the other cases, in which women are less liable than men, I may instance the following:—Tobacconists and tobacco makers, butchers and provision dealers, milk sellers, laundry keepers, and confectioners (where the males have a ratio much higher than the females), shoemakers, glove makers, and booksellers and inn-keepers (where the males are more than twice as numerous), and lady tailors and tailoresses, and bank and commercial clerks (where the males are nearly twice as numerous as the females). The cases where the females appear to be much more unfavourably influenced by their occupations than the males are the following:—Lawyers, thatchers, packing-case makers (where the female rate is nearly four times as high as the males), actors and conjurers, railway and telegraph and telephone operators and paper makers (where the females are more than twice as numerous as the males), and milliners and dressmakers, Inn and hotel servants (where the females are nearly twice as numerous as the males).

As regards particular occupations other than those already discussed, it is noteworthy that Commercial Travellers are exceedingly liable, probably owing to anxiety to dispose of their wares, and the common tendency amongst this class to intemperance. Tobacconists, tobacco, and snuff workers rank out so high (13.8) compared to tobacco-pipe makers, who are only 5.8, that it suggests the inquiry whether the noxious weed may not have the disadvantage of helping to increase insanity, and fully justifies, I think, the question being put on this point as well as on the drink question, to any male patient admitted into an asylum.

Musicians and teachers of music come out rather unfavourably (13.3), which, considering the sensitive nature of such, and the frequency with which anxiety is a factor also, is not surprising.

Seamen (merchant service) also come out rather high (13.2), probably to the anxiety of keeping watch, shipwrecks, etc.

Of shopkeepers, next to chemists (13'2) goldsmiths, silversmiths, and jewellers, come next, with a ratio of 12.2, which is not to be wondered at when we consider that it is a trade very trying indeed to the eyes and brain. Inn-keepers and hotel-keepers show a ratio of 11'2, but as boarding house and coffee-house-keepers—the latter, as a rule, a very steady class of people, and very often indeed teetotalers—are included with the former, the figures are probably hardly fair to coffeehouse-keepers, and much too favourable to inn-keepers.

Dissenting Ministers, Catholic Priests, Missionaries, and Scripture Readers, for some reason, seem to be more favourably situated than the Clergymen of the Established Church,

the proportions being 11 and 8.5 respectively. The reason of this it is difficult to conjecture. Police and prison officers come out higher than sheriff's officers and toll-collectors (the proportions being 8.2 and 5.7 respectively): probably the more exciting and anxious nature of the duties in the former case may explain the difference, and, in my opinion, certainly does. All persons employed in Agricultural pursuits seem to come out pretty well, and farmers and those who live in the house with them the best of all (none being more than 7.4, and the farmers only 4.9). Persons employed in the heavier kinds of manual labour also figure well, none being higher than 73, and coal miners, iron miners, lead workers, etc., being as low as 4'9. That lead workers should be so free is strange, and is probably an error, owing to these being grouped with other mine workers, for workers in lead are not only prone to Insanity, but the disease is often traceable to the lead as the whole cause of the mischief.

As regards persons employed in mills and manufactories all stand pretty favourably, those engaged in silk manufactories being the highest (6.2), whilst those engaged in cotton and flax manufactories stand at the low figure of 3.8. Brewers, who are classed in the tables with corn, flour, and seed merchants, stand at the favourable figure of 5.3, but this is probably owing to their association with more favourable trades. It may, however, be owing to the fact that although they make the ale they do not necessarily drink it—a temptation to which they are not so much exposed as are the drink sellers.

As regards the trades which affect men more than women, and vice-versa, the difference between Civil Service workers has already been referred to, and a possible explanation thrown out, and the same has been done in the case of tobacco and other workers.

As regards those concerning which no explanation has been given, longer hours and intemperance may possibly explain the difference where the adverse balance is on the side of the men, whereas, in the cases in which it is on the side of the women, it is in its most striking instance—and this is that of the sawyers, thatchers, etc. (the proportions are: Females 40'1, and males only 10'6)—explained probably by the fact of the women being put to this kind of work because they were already weak in intellect, and fit for nothing better. In the case of actors (where the females are more than twice as numerous as the males) probably the irregular hours being too

much for the female physique may explain it, whilst as regards the hotel servants, as charwomen are classed with them, an element of poverty and privation has naturally to be considered. Owing to the absence of the necessary statistics the influence of some trades and occupations upon insanity cannot be considered at all. This is greatly to be regretted, for it would be very interesting and instructive to know what is the influence as regards insanity of such occupations as Civil Engineers, Medical Students, Engravers and Photographers, Authors, Navy Officers, Seamen of the Royal Navy, Cabinetmakers, and many other occupations. Moreover there ought to be very little difficulty about the matter, for the number of insane in all these classes is known, but on account of the number of persons engaged in some of these occupations being apparently not known the ratio cannot be determined. Surely in such occupations as those I have mentioned there must be some means of ascertaining the numbers of each in most of them at all events, if not in all. The number of medical students could easily be determined by enquiries addressed to the Deans of the various Medical Schools. The number of Naval Officers and seamen of the Navy could surely be obtained by application to the Admiralty, whilst though all bricklayers, masons, etc., do not belong to the Trades Unions, yet the Union connected with each trade has probably certain approximate figures available as to the number of men engaged in it whether connected with the Union or not.

But whilst the influence of Occupation is difficult to determine on account of the imperfection of the only data available, and no very definite or valuable results seem to have come out as a consequence of this brief survey of the last published statistics on the subject, it is a strange thing that "No Occupation at all" seems to be very favourable to insanity. The number of unoccupied people in this country is, unfortunately, not given, but seeing that in the Commissioners' Tables under the heading "Persons (over 15 years of age) of no occupation or occupation not defined in the preceding groups, and 'Unknown'," so many as 2,528 males, and 2,464 females or a total of 4,992 persons annually of these classes become insane, or in other words, nearly one-fourth of the people who become insane annually in England and Wales belong to this class, it is not difficult to see that no occupation at all, or

^{*} In the Blue Book for 1902 I find some of these deficiencies have been made good.

having nothing to do is even worse as regards the prospect of upsetting the mental balance than some of the most dangerous occupations of all!

THE INFLUENCE OF THE SEASONS ON INSANITY.

At one time this factor was thought to have a very great bearing on Insanity, as the popular term, lunacy (luna, the moon), suggests, and even now alienists cannot but be struck with the remarkable increase of insanity which occurs regularly with some seasons, and diminishes as regularly with others. The following tables, taken from the report of the Commissioners for the year 1900—(the last table of this kind appeared in the Report for 1900)—gives the number per cent. of the cases which occur every month throughout the year:—

January		56 [.] I	July	•••	60.0
February		53.8	August		53.2
March		28.1	September		51.4
April		58.8	´ October		51.4
May	•••	64.1	November		52.0
June		5 9·8	December	•••	53.2

From a perusal of the foregoing, which is based upon the Monthly Statements of these years it is seen that January starts with the ratio of 56°1; that a substantial drop occurs in February; that a very substantial rise occurs in March; and is maintained in April; that a very great rise takes place in May, and a substantial drop in June; that in July a slight rise takes place, which is followed by a very substantial drop in August; that this falls lower in September, and continues throughout October, but that in November there is a slight rise, which is again maintained in December. Thus the table with the months arranged according to the degree in which they appear to influence Insanity would be as follows:—

1. May	 64° I	7. February	 53.8
2. July	 60.0	8. August	 53.2
3. June	 59.8	December	53.5
4. April	 58.8	10. November	 52.0
5. March	 58.1	 September 	51.4
6. January	 56 [.] I	13. October	 51.4

Now, when these ratios are added up it is found that the total average admissions to asylums for the six summer months (April to September) is 3476, while the total for the six

winter months (October to March) is only 325 5. And this tendency for Insanity to apparently increase during the summer months, that is to say for the admissions to Asylums to be most numerous from April to September, and to diminish during the winter, or, in other words, for the admissions to be less in the aggregate in the winter than the summer has been the subject and matter of note ever since scientific observations have been made on the subject. Thus not only do the Commissioners' Reports for many years bear out all this but Esquirol also noticed it so far back as 1862, and Dr Charles Hood, the Physician to Bethlehem Hospital in his work entitled "The Statistics of Insanity," makes use of the following words:—"The admissions are more numerous in the six summer than in the six winter months, particularly during the months of May, June and July." (Statistics of Insanity,

page 86.)

As regards the two principal forms of the disease, namely Mania and Melancholia, May is the worst month for each, and October the best, and in each case May, June and July are the worst months for both. One is rather surprised at this, and especially as regarding Melancholia, as although one would have thought that the long dreary days of November, December, January and February would have had a great tendency to bring out any latent mental depression, one would, on the other hand, have imagined that the bright happy thoughts inspired by the opening of the flowers, and the singing of the birds in May would have helped to dispel gloom, and in October when the leaves are beginning to fall, and there are signs of coming winter, the mind would be apt to be correspondingly depressed. Exactly the contrary, however, is seen to be the fact, more cases of Melancholia being admitted to Asylums in May than any month of the year, and in October the fewest of all. There must, of course, be some reason for this strange occurrence, and I think it must be this:-Melancholia, unlike Mania, is, as a rule, slow in its oncoming and its development, and I think that what probably happens is that the cases which are admitted in the months of May, June and July—summer months—may in many instances be cases which have sickened of the malady during the winter months, and, therefore, that although they are admitted during the summer season, their illness has probably commenced and developed in the winter season. Regarding the apparent greater prevalence of Mania during the summer months rather than the winter, although the admis-

sions to asylums are undoubtedly greater when both sexes are taken together (this I have so far done), yet, when they are separated, the figures, as regards the men, are apt to be rather deceptive, for although the ratio is less for the closing months of the year, yet in January it is far above the average, and nearly as high as it is in July. One is at first One is at first tempted to see the explanation of this in the drinking habits of the people who, about Christmas and the opening of the New Year, are apt to go to excess, but when one sees in March the same thing, and even a higher rise still, one hesitates to advance this theory. In March, too, a similar unaccountable rise takes place with Melancholia as regards the men, and the result of it all is that when one comes to analyse the figures closely it is found that the configuration of the table depends upon the women, and this, whether as regards Melancholia or Mania, and it is regarding them only that it can be said with literal truth that Insanity is more prevalent during the summer than the six winter months, and particularly during the months of May, June and July, and it is only with these, therefore, that insanity is apparently influenced by the seasons.

THE INFLUENCE OF SOCIAL CONDITIONS ON INSANITY.

This question has already been partly touched upon under the heading of Occupation. I re-introduce it here in order to discuss it upon the two broad issues of Poverty and Affluence so as to see what, if any, influence these two elements exert broadly upon the disease, Insanity. The subject can best be discussed by reference to the Commissioners' Tables. According to table xv., Appendix A., of the Blue Book for 1906, the population of England and Wales (at the last census in 1901) was 32,527,843, and the number of reported Lunatics, Idiots, and Persons of Unsound Mind was, on the first of January of that year, 121,979. Of this number 111,256 or 32.26 per 10,000 of the population were pauper lunatics, and only 9,802, or 2.84 per 10,000 private patients. (Vide Tables i and ii.) As this makes the pauper more than eleven times as numerous as the private patients, the statistics would at first sight give the impression that a poor person is eleven times more liable to insanity than one who is in comfortable circumstances. As, moreover, the total pauper population of England and Wales is only 026,741 ("Daily Mail" Year Book, 1907), this would make paupers appear to be liable to Insanity in the enormously high proportion of nearly 12 in

every 100. Now this, of course, is ridiculous, and I may say at once that the real truth of the matter is that poverty is a predisposing cause, as shown before in the course of this work, to a very real degree, but to nothing like the extent a first perusal of the figures would lead one to infer.*

THE INFLUENCE OF LOCALITY ON INSANITY.

It was for many years believed—whether, however, that opinion is held now I cannot say—that insanity was more prevalent in agricultural than in non-agricultural districts. Seeing that farmers and agricultural labourers, farm servants, shepherds, gamekeepers, etc., are, according to the Commissioners' Returns (vide page 35), comparatively so little liable to insanity, I question whether such is the case.

Regarding some forms of insanity, however, it is well known that from some cause or other living in a certain locality predisposes to it. This, at all events, is the case as regards. Epileptic Insanity. Concerning this Dr. Clouston writes:— "Epileptic Insanity prevails very differently in different parts of this country. In the Northern Agricultural counties of England, where wages are low, life is stagnant, food is not too abundant and beer is almost universally used as part of the dietry, Epileptic Insanity is unusually common, making over 11 per cent. of all the admissions, and in some individual counties forming about one fourth of all the inmates in the county asylums of these counties. This includes Epileptic idiocy and imbecility as well as the cases where the epilepsy arose later in life. In such parts of the country the former kind of epileptic insanity prevails much more than the latter. In the better-off mining and manufacturing counties, such as Durham, Glamorgan, Stafford, and in some counties of mixed population, such as Sussex, the proportion of epileptic insanity in the admissions is only about 5 per cent. Clinically epileptic insanity is more acute and typical in those districts. In the large cities of England it holds an intermediate place forming about 8 per cent. of the admissions to the asylums of these cities." (Clouston's Mental Diseases,

^{*} The fact of the matter is that when respectable wage-earning people become insane there are too often no means to send them to Private Asylums, and hence they are almost invariably sent to the County Asylums where, sooner or later, they generally fall into the category of paupers. They do not always start so, but owing to their friends being unable to keep up the payments they soon become so.

page 419.) Thus, whilst as regards insanity as a whole one is unable, owing to the lack of the necessary statistics, to settle the question as to the influence of town or country, or particular localities, as regards the epileptic variety of it, and the form known as Idiocy, the country seems decidedly more unfavourable for such patients than the town.*

^{*} In lieu of these Tables (Occupation Tables) which used to be such a prominent feature in their Reports for so many years, the Commissioners, on page 15 of their 60th Report, have introduced a new Table, from which it appears that Congenital Insanity is considerably above the average in purely agricultural districts (which is probably owing, I think, to the inter-marriages which so frequently take place); that Delusional Insanity is strikingly below the mean in purely agricultural districts, and seems to claim almost all its victims from the industrial centres and large towns (which is difficult to account for, but may possibly, I think, be owing to town-workers being for the most part great readers of newspapers and works of fiction, and hence have their insanities coloured accordingly); and lastly, that the cases of General Paralysis are considerably below the mean in agricultural districts, rather above in the industrial centres, and more numerous still in London. (This, of course, is only what we should expect when we remember the greater prevalence of Syphilis in these latter places, and the proved close connection between Syphilis and General Paralysis.)

PART II.

THE PREVENTION OF INSANITY.

The causes of insanity being known we now come to the second and more important part of our subject, namely, its prevention.

Can Insanity be Prevented?

Not altogether, of course, for as long as the world lasts it will, I expect, always claim some victims, neither the advance of education, the bettering of the habits of the people, nor the diminution of poverty—all of which are, of course, possible—being likely to remove it entirely. What, then, do I hope from the publication of this essay? What I hope is this. I hope that after I have shown, as I intend to do, how a large amount of the insanity which at present exists amongst us can be removed, that those who read it will not be content with admitting that what I say is very forcible, and very true, that they quite agree with me, and so forth, but that they will suit the action to the word and determine with me that by tongue and by pen, whenever opportunity offers, they will do their best to leave the coming generation freer from this dread malady than the present is. Of course over some of the causes of the disease neither they nor I have any control, but there are two amongst them—and these two, fortunately for us, happen to be amongst the two chief causes of all which a powerful, intelligent, and combined effect could easily remove, and these two causes, needless to say, are Heredity and Intemperance. Being such important, as well as completely removable causes, we will discuss these two pretty fully and, following the order observed in the first part of this book, take Heredity first.

How to Prevent the Hereditary Transmission of Insanity.

That in an enormous number of instances the disease is transmitted we know, and we know too how it is transmitted.

Knowing these facts, then, why do we allow the propagation to go on? Years hence, when people are wiser than they are now, and when, by their wisdom, it is to be hoped that the prevalence of this dire malady will be materially checked amongst us, they will wonder why the present and past generations were so foolish that, although knowing well the causes of a large amount of the insanity in our midst, and knowing equally well how easily removable these causes were, they yet took no serious steps to remedy the evil.

Why is it? What can be the reason? Well, the chief reason, I think, is ignorance.

I may be wrong, but I am strongly of opinion that with the exception of the members of the medical profession, and those who have suffered in their own families, it is not generally known that the disease is really capable of transmission. Then, again, of those who know that it is capable of transmission, very few seem to realise how very prone to transmission it is.

Thus only the other day I read of a case where a doctor married a lady whom he knew to be tainted with this malady, and again of another case, where an asylum attendant married a former patient, and so on—with, of course, the usual lamentable results. Now, if people who do know of the risks persist in contracting such unions, I confess I despair of a remedy. Let us hope, however, as indeed I believe, that cases like this are few and far between, and that the bulk of English young men and women are too intelligent and sensible to go with their eyes open into almost certain disaster and misery if they are only warned beforehand of the danger. For their sakes then, and in the interest of what I have at heart, namely, the Prevention of Insanity, I lay down the following rules, which, if they were only rigidly observed, probably fully a fourth of the Insanity now amongst us would disappear in the next generation.

RULES WITH REGARD TO MARRIAGE DESIGNED TO PREVENT THE TRANSMISSION OF INSANITY:—

- (1) A person of either sex should on no account contract marriage with a person of so-called weak intellect, or one who has ever been certified as insane.
- (2) Two persons should never marry where there is a family history of insanity on both sides, that is to say,

where the father, mother, or near relative of both is or has been insane.

(3) Even if there is a family history of insanity only on the side of one of the parties it is exceedingly unwise to do so, for the risk is very great indeed as regards the children of such marriage, and if the taint is on the wife's side there is some danger, should she become a mother, of her falling a victim to puerperal insanity.

(4) First cousins should seldom, if ever, marry, for should there happen to be the least neurotic taint in the stock from which they are descended the result as regards the progeny

is almost sure to be most disastrous.*

(5) No man or woman should ever marry any person of the opposite sex who suffers from Chronic Epilepsy even

if the "fits" are only of the mild type.

If these rules were only observed all those of experience in Insanity will agree with me in saying that the good effects would be distinctly visible in the next fifty years, and that if they only continued to be observed the close of this century would yield very different statistical results as to lunacy than are seen in the Commissioners' Returns to-day. thing possible, then, should be done to make these facts known, and to caution people as to the dangers of inter marriage with tainted families! If young men and women still persist in such a foolhardy course after being thus warned it is difficult to see what can be done, unless Statesmen are bold enough to intervene, and, by declaring such marriages illegal, and the children therefrom illegitimate, deter wouldbe offenders, and thus check in some measure the mischief. Regarding those cases where, for motives of money or other interested reasons, a healthy young man is led to contract a marriage with a tainted young woman, and that taint is wilfully concealed, not only should such a marriage, on the true facts being disclosed, be declared null and void, but the actively guilty parties in the fraud ought to be mulcted in a substantial penalty. I say this calmly and deliberately, for nothing is more heartless and cruel than to promote a union under these conditions, and by a resort to such unworthy As to those cases where the husband or wife beartifices. comes insane after marriage, the circumstances are quite different, and much as I deplore the present large amount of insanity in our midst, I would not be a party to the unjustifiable and immoral doctrine that prevails in Germany, where,

^{*} Vide Dr. Savage in "Lancet" for April 6th, 1907.

I believe, it is the case that if either party have been insane for a certain period (three years, I think, is the time) the sane party can marry again. Apart from the possibility of the recovery of the insane husband or wife, and the unpleasant consequences in such an eventuality which must result, there remains the fact that the one has taken the other "for better and for worse, in sickness or in health, till death us do part," and by this solemn contract they should in all justice abide.

THE PREVENTION OF INSANITY WHEN THERE HAVE BEEN PREVIOUS ATTACKS.

A glance at the Commissioners' Returns shows how often, when a patient apparently recovers from Insanity, he later on relapses. As has been seen (vide page 9) the large proportion of 22'3 per cent. of the women relapse, and 16 per cent. of the men.

Some of these cases, no doubt, are cases which may be said to have never recovered at all, many of them, in all probability, being cases of recurrent mania, where, when the maniacal period has passed, a more or less long lucid interval intervenes, in which the patients are to all outward appearance perfectly recovered, but in reality the appearance is deceptive, for with unerring regularity when the time for an attack has come round, they invariably become insane again. Sometimes such patients are insane for a month, then well for a month, and this continues sometimes for years. At other times it is three or six months, or longer, that each period lasts.

Other cases which relapse are those which are discharged before recovery is complete, and where, owing to the importunity of the patient or his friends, the patient is unwisely taken home and to his business too soon, the result being that the brain, being only imperfectly restored, easily loses its balance again.

And this leads me to say that if these relapses are to be prevented the utmost care should be taken both by the patient himself and by those interested in him to see that the cause which originally produced the disease is not allowed to operate again.

Thus it is needless to say that if mental anxiety and worry have been the causes of the breakdown, he should be as far as possible kept free from them in future. If over-work was the cause, such excess of work should be scrupulously avoided ever after.

Again, if pregnancy, or child-birth, or suckling an infant were the cause, the repetition of these occurrences should, if prescribe, be avoided, but if they do take place, unusual care should be taken at these times to see that proper nourishment is given, every source of excitement or worry kept away, and nothing omitted which can possibly prevent the onset of the malady.

Again, supposing that Intemperance has been the cause, needless to say that for the future, if there is to be no relapse, the person must either avoid alcohol altogether, or else only take it in the strictest moderation. And so on with each particular case according to the cause to which the mental Thus, where self-abuse was the breakdown was owing. responsible factor, the person must be warned that if he again inculges in it the same result is sure to happen again, and possibly next time he may not recover at all; if a love affair was the cause, all love entanglements should be looked upon with suspicion in future, if not avoided altogether, whilst if religious excitement was the thing which upset the mental balance, for the time to come all religious excitement should be avoided. Change of residence or occupation, too, will, in many cases, be found desirable, say from town to country, or from too isolated a spot in the country to one nearer a large town; whilst as regards Occupation, a change from work of a mental and sedentary kind to one of manual labour and out-door life will often be beneficial. Where over-study or some other fault in education was responsible, needless to say it should be carefully rectified for the future. On all these points the advice of the physician formerly having charge of the case, or some specialist in mental diseases should be sought and, when given, should be scrupulously followed. Dr. Clouston, who, on account of his unique position and unrivalled expenence, is well entitled to a hearing on this subject, gives the following advice to those who have at any time suffered from that very common form of insanity, Melanciphia. "I tell such persons," says he, "one and all, to ther fit Let them take precautions in time. The falling of it is few pounds in weight may be to them the first real number of the disease returning, even though they feel at the time as well and hearty as possible. It is at this stage That making and rest do real good. I always advise my re-" The melanchelic patients to weigh themselves every The third seed a record of their weight, to lead a regular life, FOR THE PUSE system and order in their work. Reducing

their ordinary lives to a routine is the safest thing for them if they can do it. Like leanness, want of system, and method goes with a tendency to melancholia, in my experience. They should not work, or think, or feel in big spurts. And as the crises of life, the climacteric, pregnancy, child-birth, and senility approach, let special care be taken by them. Do not let them get to depend on soporifics for sleep. Nothing is An hour's natural sleep—"tired nature's more dangerous. sweet restorer"; is worth eight hours 'drug sleep. A country life with much fresh air, is no doubt the best if it is possible. Regular changes of scene, "breaks" in occupation, and long holidays, are, of course, the most desirable for some people. Though travel and change are very often harmful to actual melancholic patients, yet, to many persons who merely have the temperament and the tendency, they are most effective in warding off attacks. I know several people who, in that way, seem to keep well and moderately happy. The great thing to be avoided is fatiguing travel—seeing too much in too short a time." (Cloustons' Mental Diseases, page 137.)

And writing on the subject of prophylaxis in the opposite and more common condition still, in fact, the commonest type of insanity of all, namely, Mania, he says:-"I cannot help thinking that for such persons to take to study, or to occupations that imply much brain work, is a risk, though they have often bright intellects. It seems to me as if, instead of that, they should go back to nature and mother earth and become farmers and colonists. I once knew two brothers, twins, alike in mind and body, who had a strong heredity to mania. They both became medical students, and one had an attack of acute mania at twenty, which ended in dementia. At the beginning of his brother's attack the other had distinct premonitions of the same disease—was sleepless, restless, unsettled, had queer sensations in his head, and felt as if he would lose his self control. But he at once fled, as for his life, from books and brain work, and went to be a surveyor in the Far West. His neurotic symptoms passed off, and he grew into a strong and happy man. I think it is the instinct of self-preservation that makes young men sometimes fly from the influences of civilisation, and take to the backwoods. But what about young women? Alas, the prospect for those with such heredity, and particularly when they are well off, and live in cities, is often lamentable. So far as my experience and observation go, the regulated life of a convent or sisterhood, or systematic religious and philanAgain, if pregnancy, or child-birth, or suckling an infant were the cause, the repetition of these occurrences should, if possible, be avoided, but if they do take place, unusual care should be taken at these times to see that proper nourishment is given, every source of excitement or worry kept away, and nothing omitted which can possibly prevent the onset of the malady.

Again, supposing that Intemperance has been the cause, needless to say that for the future, if there is to be no relapse, the person must either avoid alcohol altogether, or else only take it in the strictest moderation. And so on with each particular case according to the cause to which the mental breakdown was owing. Thus, where self-abuse was the responsible factor, the person must be warned that if he again indulges in it the same result is sure to happen again, and possibly next time he may not recover at all; if a love affair was the cause, all love entanglements should be looked upon with suspicion in future, if not avoided altogether, whilst if religious excitement was the thing which upset the mental balance, for the time to come all religious excitement should be avoided. Change of residence or occupation, too, will, in many cases, be found desirable, say from town to country, or from too isolated a spot in the country to one nearer a large town; whilst as regards Occupation, a change from work of a mental and sedentary kind to one of manual labour and out-door life will often be beneficial. Where over-study or some other fault in education was responsible, needless to say it should be carefully rectified for the future. On all these points the advice of the physician formerly having charge of the case, or some specialist in mental diseases should be sought and, when given, should be scrupulously followed. Dr. Clouston, who, on account of his unique position and unrivalled experience, is well entitled to a hearing on this subject, gives the following advice to those who have at any time suffered from that very common form of insanity, "I tell such persons," says he, "one and all, to Melancholia. keep fat. Let them take precautions in time. The falling off of a few pounds in weight may be to them the first real symptom of the disease returning, even though they feel at the time as well and hearty as possible. It is at this stage that change and rest do real good. I always advise my recovered melancholic patients to weigh themselves every month and keep a record of their weight, to lead a regular life. and to practise system and order in their work. Reducing

their ordinary lives to a routine is the safest thing for them if they can do it. Like leanness, want of system, and method goes with a tendency to melancholia, in my experience. They should not work, or think, or feel in big spurts. And as the crises of life, the climacteric, pregnancy, child-birth, and senility approach, let special care be taken by them. Do not let them get to depend on soporifics for sleep. Nothing is more dangerous. An hour's natural sleep—"tired nature's sweet restorer"; is worth eight hours 'drug sleep. A country life with much fresh air, is no doubt the best if it is possible. Regular changes of scene, "breaks" in occupation, and long holidays, are, of course, the most desirable for some people. Though travel and change are very often harmful to actual melancholic patients, yet, to many persons who merely have the temperament and the tendency, they are most effective in warding off attacks. I know several people who, in that way, seem to keep well and moderately happy. The great thing to be avoided is fatiguing travel—seeing too much in too short a time." (Cloustons' Mental Diseases, page 137.)

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And with all that this gifted writer remarks I thoroughly and heartily agree.

THE PREVENTION OF INSANITY ASSIGNED TO "UNKNOWN" CAUSES.

On this subject not very much can be said. The causes being "unknown" they cannot, of course, be dealt with. What they probably are in many cases I have already hinted at, namely Drink and Heredity. The latter is especially prone to be concealed, as owing to the stigma attached to the disease, people are ashamed to admit the facts. It is very foolish, and very regrettable, but that the feeling exists is undeniable. Dr. Clouston says: —"That abominable and cruel phase of public sentiment which connects shame and disgrace with mental disease does an immense amount of harm to individuals and society, and our profession should by all means fight against it." ("Mental Diseases," page 81.) I myself, too, have felt so strongly the foolishness of such sentiment that I have given utterance to my views in the I know-and, following words:—"Ashamed! Of what? unfortunately it is true—that if a member of a family be stricken with loss of reason, and on that account be sent to an asylum, it is "the usual thing" for the friends to be ashamed. No one in the least acquainted with our social life but again and again must have noticed this. Apropos, is not the following, or something like it, a common incident of every day life? A new resident comes to a neighbourhood, and the people are not unnaturally anxious to know something about him. Amongst other questions one generally asks a few particulars concerning his family, "How many sons has he?" is the inquiry, "Three," is the answer. "I thought he had only two," you say. "No" is the reply, "he has three; but one of them," and here your informant, approaching as close as possible softens the tone of his voice, and speaks the rest of the sentence with bated breath, "one of them," he whispers, "is in an Asylum."

Now, what I want to know is: Why this whispering?

What is there that should make people ashamed that a relative of theirs is an inmate of an Asylum? People are not ashamed to say that their father is ill of heart disease, or

their mother with disease of the lungs, that they have a brother suffering from liver disease, or that they are themselves affected with a disease of the stomach.

Why, then, in the name of common sense, should they be ashamed because the enemy, Disease, rejecting the heart, lungs, and other organs has taken up his habitation in the brain?"*

Unfortunately, however, people are ashamed, and the result is in large measure, I am convinced, the high percentageno less than 17'1 per cent. for males, and 15'1 for females, according to the Commissioners' Returns—put down to "Unknown Causes," when, in reality, the real cause is probably in full half the cases the transmission of the disease from parents, or in other words, Heredity. As one writer on this subject has well said:—" From time immemorial it has been well recognised that the great cause predisposing persons to insanity of all kinds is heredity taint, and as time goes on, and we are enabled to make more careful enquiry into the influence of hereditary predisposition on the production of disease, the truth of this old-time belief becomes more evident. Unfortunately, we are not in a position at present to say authoritatively what amount of the insanity met with to-day is due in the first instance to inherited weakness. statistics we have on the subject while pointing to heredity as the great predisposing cause, vary so greatly that it is almost impossible to strike an average for the whole.

This variation of the figures of different observers, which is much to be regretted, is directly due to the efforts of relatives and friends of the insane to conceal what they consider a stigma upon the family. We are all only too well acquainted with the manner in which these people, even in the poorer ranks of life, endeavour by every means to keep from us a knowledge of such family taint. Every writer on Insanity has commented on it, and all condemn it. One writer has compared the difficulty in getting at the truth in such cases to that which might be expected in dragging from an erring woman the confession of her one frailty. Yet, notwithstanding this hard lying on the part of relatives and friends, careful observers have been able to trace in from 25 to 90 per cent. of the insane coming under their notice a distinctly marked hereditary tendency to insanity or allied nervous

^{*} Extract from the Author's work, "Modern Pessimism: its Cause and Cure" (1885).

disease. Moreau puts his percentage as high as 90, Burrows sand 85, Holst 69, Jassen, 65, Michea 50 to 75, Thurnham 51, Webster 32, Needham 31, Guislain 30, Maudsley 28, and

Esquirol 25.

These figures vary widely. They vary with the amount of prevarication and untruth practised by the relatives of the insane, and it is to be feared that until human nature becomes something different from what we know it to-day, or until families are compelled by law to keep some kind of family record, little more than we at present know on this most important subject will be learnt from statistics. From education, the modern cure for all ills, we can expect nothing, for we find that in the upper classes, where education should be most advanced, truth upon this one point at least is less plentiful than among the ignorant.* Seeing, however, how important it is in the cause of truth and progress that statistics on this subject should be correct, let us hope that when people have this importance pointed out to them they will duly recognise it, and in future not be ashamed to tell the truth, the real truth, and nothing but the truth, and thus do their share in helping in the prevention of Insanity.

THE PREVENTION OF INSANITY DUE TO DRINK.

Having now pointed out the best way in my opinion calculated to reduce to a minimum the dire and fatal influence of Heredity as a factor in the causation of Insanity, let me next endeavour to show what can be done in the same direction with regard to Intemperance.

As we have seen, although Heredity has a total influence exceeding that of Alcohol, yet as regards men this latter factor is even more potent than the former, for whilst Heredity heads the list amongst women by accounting for 25 per cent., Alcohol leads with the men by accounting for 22.5 per cent. The same cause, namely, Alcohol, also accounts for no less than 9.2 per cent of the women. What, then, can be done to check all this terrible mischief?

It is useless to urge, as some temperance reformers do, that to cure this and every disease with which alcohol is directly or indirectly concerned, the only remedy is to stop alcoholdrinking altogether. Such a course is not only not possible,

^{* &}quot;The Propagation of Insanity and Allied Neuroses," by S. A. K. Strahan, M D., "Journal of Mental Science" for July, 1890, pages 330-331.

but there is no necessity for it. Moderate drinking, that is strictly moderate drinking to the extent, say, of one or two ounces of alcohol a day, is not only not harmful, but with some people may even be beneficial. Excess, however, and drinking between meals or at irregular times is undoubtedly injurious both to the person himself and his offspring, and in justice to the latter, and to the community of which he will form a member, either the inebriate should cease to drink, or if he will not do this the State should interfere and prevent his becoming a parent.

Of course I know that it is far easier to make this suggestion than to carry it out, but still the evil is so great and pressing, and its cause so unmistakably clear that at least something should be done in this direction by those wishing

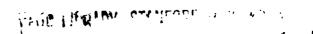
well to the State.

But are there no suggestions which shall possess the requisite qualities of being at once feasible and effective? I think there are, and now proceed to mention them:—

I. Pamphlets on this subject should be distributed wholesale by the various Temperance Societies drawing particular attention to this phase, and pointing out plainly to married and un-married persons, and especially the former, the injury that is sure to be inflicted on their offspring, as well as themselves, by indulging in this habit.

II. When the banns of any marriage are pronounced it should be deemed a "just cause or impediment" for the clergyman, if it can be proved that either of the parties is intemperate, to refuse to celebrate the marriage and acquaintances of the parties should deem it their duty to And the same policy should be mention these points. adopted, needless to say, by the Registrar at the Registry There would be difficulties no doubt, but they could be got over, and although an innocent and deserving couple might, owing to a mistake, now and again have to suffer, yet it would only be for a time, and the little temporary inconvenience, occasionally unjustly suffered, would surely be more than counter-balanced by the immense advantage gained by the community at large through such a law being in force.

III. But supposing a man (or woman) persist in drunken habits after marriage. What then? Well, my reply is that he should be *made* to keep sober. The Inebriates Act provides that after three convictions for drunkenness in



one year, on the fourth conviction the magistrates have power to send such persons to a Reformatory for a term not exceeding 3 years. And, needless to say, this should always be done.

If it be asked, how will their wives and families manage during the time the bread-winner is at the Reformatory, the answer is that the inebriate husband must, if his family have no other source of income, be made to work and contribute to

their support.

If it be argued that the children will suffer through the loss of a father's controlling hand, or mother's parental care, my reply is that if inebriates show themselves such poor controllers of themselves how can they hope to be better directors of these children? The spectacle of a drunken husband and father is demoralising in the extreme to wife and children, and so when the head of a family is a drunkard it is better for there to be no husband or father in the house at all than a parent of this sort! I am not a teetotaller. I am not, therefore, a bigot on this subject, but when I find that in addition to being responsible for one half of the poverty in this land, this horrible craving is also one of the chief causes of Insanity too, I almost lose patience, maintain that the mischief has gone too far, and is of too serious a character to merely moralise upon, but that it is time to take serious action. I know that it will be said that it is dangerous to trifle with the liberty of the subject. So it is, I admit, but we do not permit this delicate sentiment to prevent us putting under the care of the police those who are unable to keep their hands from picking and stealing, and doing bodily harm to their neighbours; we do not allow this sentiment to prevent us from placing under the care of the authorities those who take unwarrantable liberty with their own lives, for instance, those who attempt to commit suicide, why then should we allow any squeamish regard for our reputation for love of liberty to prevent us from taking similar energetic action when a man or woman is slowly destroying him or herself, body and mind, with the poison of Alcohol?*

^{*} A good proportion of those who go to these places return cured of the habit, whilst, as regards the others, if these show that their will power has not been sufficiently rehabilitated to withstand temptation, they should be sent back again for a further period If they again break out after this they should be regarded as chronic and incurable drunkards. A list of their names and addresses should be given to all the sellers of alcoholic drink in their neighbourhood, and it should be a penal offence to supply them.

There is even *more* need *here* for action, for whilst, in other directions, the criminals in most cases injure none but themselves, at all events only those living, when they drink to excess they often injure, as has been seen, not only themselves and their living relatives, but innocent children yet unborn.

THE PREVENTION OF INSANITY ASSIGNED TO "OTHER BODILY DISEASES OR DISORDERS."

I have already stated my opinion (vide page 15) that the large number of cases of Insanity put down under this heading, namely, no fewer that 14'2 per cent. of the males, and 13'2 of the females, unless influenza is included, must be an exaggeration, but that if this malady is included they are not so, as, to my own knowledge, there is hardly any disorder so frequently followed by nervous and mental trouble.

Heart disease, too, as I have said before, is, I am sure, a fairly frequent cause, for, by the irregularity of the blood supply to the brain, which results from diseased valves, or an atrophied, hyperatrophied or dilated heart, the brain is exceedingly liable to either anæmia or hyperaemia, and if this is long continued it is sure to suffer in its functions as the organ of mind. So, too, as regards kidney disease, it is easily conceivable that if the kidneys do not fulfil their important excretory functions, toxic materials are sure to accumulate in the blood, and the brain suffer accordingly, and if, in addition, there is also present that common accompaniment of kidney disease known as atheroma—where the coats of the arteries get hardened, and their lumina narrowed—there is thus not only a poisoned supply of blood, but also a deficient supply, and it is no wonder that disorder of the brain is the result. But whilst Insanity probably occurs in a fair proportion of these cases, it is not so easy to see how, nor is it, I believe, the fact that it can occur very frequently from disorders of other organs, unless, perhaps, we except certain cases of Indigestion, as a result of which Melancholia with delusions undoubtedly sometimes come on.

As regards preventive measures, needless to say that whenever any bodily diseases or disorder is the cause of the Insanity the sooner it (the bodily disorder) is known and treated the better. Where the original disorder has disappeared as where Insanity occurs after Influenza or some other "illness," nothing much more can be done than to

treat the insanity, but where the original disease persists, as in the case of heart disease or kidney disease, which I have just alluded to, then the most careful and strenuous efforts should be made to discover the precise condition of these organs, and appropriate remedies should be administered accordingly. Thus, if the heart is acting irregularly, digitalis, strophanthus, or some other drug known to act favourably in such a condition should be given; if the kidneys are not execreting sufficient urine, or there is a deficiency of ures, appropriate remedies should be administered here, and so on. And this leads me to say that it would be well if bodily diseases as causes of Insanity were more often and more carefully looked for than they sometimes are, for, in some cases, if these were cured I am quite sure that the insanity would often be The only other remark I will make is that cured also.* causes put down under this heading really the account for the large number of cases they are said to do, then I feel sure that it is in but too many of the cases through some disease or disorder brought on through intemperance, with possibly an hereditary disposition, in other words, only the reappearance once more under another guise of the two causes whose acquaintance we made in the opening chapters of this book. Dr. Clouston says:—"There are few of the unfavourable conditions of life that by themselves cause more human degeneration than the excessive use of alcohol. Many of the American Indian tribes, fine races to begin with, have been nearly killed off by it in a generation or two, degenerating in body and mind at the same time. You are aware of the pathological tissue degenerations that are caused by it, the atheromatous, the fatty, the cirrhotic changes that take place with the vascular, the renal, the hepatic, the glandular, the fibrous, and the nervous tissues, those are the individual and single-organ damages. whole organism suffers somatic and mental lowering, alteration of function, and of energising. These degenerations are transmitted from generation to generation in the same or other forms by hereditary laws, if not corrected by new improved conditions of life." (Clouston's Mental Diseases, page 444.)

And again he says:—"I am safe in saying that no man indulges for ten years continuously in more alcohol than is

^{*} Vide page 49 of the author's treatise—"A Plea for the More Energetic Treatment of the Insane."

without being pathologically changed for the worse." (Ibid good for him, even though he was never drunk all that time page 452.)

THE PREVENTION OF INSANITY DUE TO OLD AGE.

Considering that only 771 men, and 940 women, or 7.4 per cent. and 8.7 per cent. respectively of the total number who become insane every year become so from "old age," these numbers, perhaps, can hardly be expected to be substantially reduced. The principal thing for men and women who wish to escape, is to avoid excess of every kind during the earlier period of life, and when old age begins to dawn to attend carefully to the physical health. Especially should the condition of the heart, arteries, and kidneys be looked to, for these are particularly liable to become diseased about this period, and, as has been seen, they produce, first, brain disorder, then true brain disease. Old people, too, should keep themselves, and be kept, as free as possible from worry and anxiety, and profligate sons and erring daughters who have any love for their parents should pause in their sinful careers before sending an aged father or mother to the grave not only broken hearted, but worse still, bereft of reason. Indeed it is not too much to say that if any child may be truly said to have killed its parent, surely one who has been the cause of such a calamity as this is thoroughly guilty of the crime.

THE PREVENTION OF INSANITY DUE TO DOMESTIC TROUBLE (INCLUDING LOSS OF RELATIVES OR FRIENDS).

Of the 367 men and 942 women who become insane annually from this cause many could be saved their mental breakdown if they only met their troubles more philosophically, and bore their bereavements with the fortitude which the Christian religion ought to beget. Thus, supposing a parent has a bad son, why should he or she worry, as is too often the case, till the "iron almost enters into the soul," and the person either becomes broken hearted or else loses his reason? Cui bono? All this fearful worry, anxiety, loss of sleep, and terrible and long-continued mental pain will do no good to the erring one, and will not bring him back to the path of virtue any sooner, and thus the unfortunate parent suffers altogether in vain. How, then, should

such troubles be met? Should the parent try to divest himself of all his natural parental affection, and thus steel himself against the worst that can happen? By no means, at all events not at first. What, then, should be the course to be pursued? Well, first of all, and for some years, parents so afflicted should pray earnestly for their child, should ask God to convert him from the error of his ways, and then, committing their child to His care, cease to worry further. They should argue that if they pray in earnest their request, as it is a good one, is sure to be granted, and although it may be many long years in coming, it is certainly eventually to come.

Meanwhile they should possess their souls in patience and in peace. And this, even if for a time it looks as if matters. are becoming worse rather than better, and that God is paying no heed whatever to their petitions, for the goodness and promises of God, together with the case of St. Monica, the mother of St. Augustine, who had to pray for many long years before her request was granted, and many others, should ever be before them, and they should wait and trust accordingly. But it may be said this is all very well in theory, but how will it work in practice? And then, perhaps, a case such as the following is put forward:—A father has a son whom he has brought up well, educated well, and based great hopes upon. The son goes from school, say, to some business firm. There he begins all right, but after a time falls amongst bad companions, contracts evil habits, and makes his parents wretched and anxious by his irregular hours, drunken ways, and disregard of virtue and religion.

They pray for him, and hope he will reform, and try to comfort themselves in this way. One day a worse thing still happens. In order to pay his gambling debts, or to keep up his life of dissipation, the youth yields to temptation, and embezzles his employer's money. His delinquency remains undiscovered for a time, but one day it is brought to light, when a police-officer comes to the house and arrests the criminal. The shame and disgrace that fall upon him and them are so great that the poor parents feel that their cup of sorrow is more than they can bear, and that they will never be able to lift up their heads in this world again.

Undoubtedly their lot is for a time a hard one to bear, but why should they give way to despair? It may have been the very best thing that could have happened. That

son is now so seized with shame and remorse at the disgrace he has brought upon the home, and the cruel blow he has inflicted upon his innocent parents, that the chances are a hundred to one that when he emerges from prison he will lead a better life afterwards than he would ever have done if he had not sinned and disgraced himself and his family in the gross manner described. And thus what was apparently a calamity may really have been a blessing in disguise.

This is the way, then, that parents should face domestic troubles of this sort, and if they only did so, much mental suffering would be spared to the world, and fewer people would become insane. Indeed, even if the son, after such a disgrace, becomes worse instead of better, they should not despair, nay, even if the very worst of all happened, namely, that he became utterly callous and incorrigible, then they should, as a matter of duty to themselves and the other members of their family, steel themselves against such an unworthy offspring, and cease to worry about him further.

But suppose the trouble takes the shape of a bereavement, say the loss by death of a favourite child. Well, of course, this is a terrible thing, but it never ought to lead to insanity. The bereaved father and mother, or husband or wife, should meet the trial in a courageous way, and not give way, as is too often the case, to immoderate and inconsolable grief. The parting caused by death is undoubtedly a terrible trial, but if one only believes, as most of us profess to do, in the comforting doctrines of the Christian religion, and therefore has the comforting assurance of meeting the beloved one again, surely it is unreasonable to sorrrow and grieve to excess. No one, it is true, can help doing so a little, however strong his faith, but the grief in the case of a Christian man or woman should never be allowed to go to the length it sometimes does, and leading in consequence to insanity.

THE PREVENTION OF INSANITY DUE TO MENTAL ANXIETY AND WORRY (NOT INCLUDED UNDER DOMESTIC TROUBLES AND ADVERSE CIRCUMSTANCES.)

Of the 1,103 people who become insane annually from these causes very many of them, if they were only more careful of themselves, or had greater care taken of them, might certainly be saved from this calamity. If a business man, for

instance who found his work becoming an almost impossible task to him, or a doctor who found that the worry about his cases so harassed him that he felt he could not stand it any longer, or the master of a large school, or a journalist on a daily paper, if any of these felt that their work was becoming too much for them, and that their nerves, if not released, would give way beneath the strain—if all these people were only wise in time hundreds of people might be saved from insanity.

"What should be done?" you ask. Well, first of all a good holiday should be tried, and taken too, at any cost. If this only gave temporary benefit, and a relapse occurred after its effect had passed off, the business man or doctor should take a partner or assistant, the schoolmaster should take a smaller school, the journalist get employment on a weekly paper instead of a daily one. "But," it may be said, "this would probably mean a heavy reduction of income." true, so it would, but better far to put up with this than by persisting in work which is obviously too much for him to run the certain risk of, after a longer or shorter time, not being able to earn any income at all! Apropos, thousands of people lying hopelessly insane in our asylums to-day would, I am sure, be living as active and useful members of society, and fulfilling their duties as husbands and fathers, if only they had of two evils chosen the lesser, and adopted the course I am recommending. But supposing a man is wise enough to adopt this course, and yet does not improve-Why, then, he should either give up work what then? altogether, or else choose some occupation where hard work is not required. It is, I know, a bold course to recommend, but it is the right one, and if he has not the courage to adopt this course of his own initiative, his friends and relations should compel him to do it, for better far, is it not, to have a *poor* relative in the family than an insane one?

People who know nothing of what constant worry—business and professional — will do, may ridicule these remarks and suggestions, but I know by personal experience what worry means, nearly experienced in my own person its fullest bad effects, and one of the chief regrets of my life is that I held on for years to a large and harassing professional practice when I ought at all costs to have retired.

And now, as regards Over Work. This presumably refers to mental over work, for physical over work is, I take it,

included under the heading "Over exertion." That this should account for a substantial number of cases is not surprising when we see how some children are made to work at school, and how hard some young men and young women cram for examinations. Needless to say, if the amount of Insanity from these sources is to be diminished it must be by carefully providing that no boy or girl up to the age of 15 or 16 should do more than five or six hours' mental work daily, and the youth or girl should cease to do even this much if he or she shows by sleeplessness, mental confusion, or any other sign, that he or she is not equal to it. Moreover, children with any neurotic or insane heredity should be educated with special Dr. Clouston, indeed, goes so far as to say that "as to the mode of education of the children of insane or neurotic parents, there can be no doubt whatever that it ought to be on physiological lines, and under medical advice." (Clouston's Mental Diseases, page 634.)

As regards the cramming of young men and women, he is equally explicit, saying:—"If there is anything which a careful study of the higher laws of physiology in regard to brain development and heredity is fitted to teach us it is this: That the forcing-house treatment of the intellectual and receptive parts of the brain, if it is carried to such an extent as to stunt the trophic centres, and the centres of organic appetite and muscular motion, is an unmixed evil to the individual, and still more to the race." (Ibid, page 534.) Again: "Some educationists go on the theory that there is an unlimited capacity in every individual brain for education to any extent in any direction you like, and that after you have strained the power of the mental medium to its utmost, there is plenty of energy left for growth, nutrition, and reproduction. Nothing is more certain than that every brain has at starting just a certain potentiality of education in any one direction, and of power generally, and that it is far better not to exhaust that potentiality, and that if too great calls are made in any one direction it will withdraw energy from some other portions of the organ. These persons forget that the brain, though it has multiform functions, yet has a solidarity and interdependence through which no portion of it can be injured or exhausted without in some way interfering with the functions of the other portions. (Ibid, pages 534-535.)

A little further on, quoting from Mr. G. H. Lewis' Physical Basis of Mind, he says: "Man cannot add a cubit to his

stature. The blacksmith's arm will not grow larger by twenty years of daily exercise after it has once attained a And again: "The possible extent of developcertain size." ment of every brain, and of every function in any one brain is just as much confined by limitations as the size of the blacksmith's arm, and physiology teaches us that no organ or function should be worked even up to its full limit of power. No prudent engineer sets his safety-valve just at the point above which the boiler will burst, and no good architect puts weight on his beam just up to the calculation above Nature generally provides infinitely which it will break. more reserve power than the most cautious engineer or She scatters seeds in millions for hundreds to architect. grow, and she is prodigal of material and strength in the heart and arteries beyond what is needed to force the blood current along; therefore we have no reason to think that any function of the brain should be strained up to its full capacity except in extreme emergencies. Especially do those principles apply if we have transmitted weaknesses in any function or part of the organ; and what child is born in a civilised country without inherited brain weaknesses of some sort, or in some degree?" (Ibid page 535.)

That there is truth in all this, and that over-education strongly predisposes to insanity is proved by the increase of the disease which has taken place coincidentally with the increase of education, and by the comparative freedom from it which nations seem to enjoy whose education is more or

less completely neglected.

And a good deal of what has been said applies also to professional and business men who use their brains more than they ought. Such men, even if they feel well, should take a regular annual holiday in addition to the weekly Sunday (about the value of this Dr. Clouston speaks highly) and should see that they also get at least 8 hours' sleep nightly. They should do all this even if they feel their work is not too trying for them, for, because bad effects are not apparent at once, it does not necessarily mean that they are not injuring themselves, but the moment that they feel that their work is becoming too trying, then they should, without the least delay, get the extra rest they need by adopting the methods recommended in the first part of this section under the treatment of "Worry."

And now, before leaving this part of my subject for another, I cannot refrain from drawing attention to the fact

that practically between 3 and 4 thousand, or nearly one-fifth of the whole number who become insane annually become so from what in one shape or form is nothing but worry—men worrying over their business; women over losing their children; boys and girls over their books; young men and young women over their examinations; doctors and lawyers worrying about their clients; mercantile men about their business, and so on, and that if people only ceased to do this, and adopted the right means to overcome and prevent the bad effects, I am quite sure that the number of persons who become insane every year from this cause would soon be materially diminished.

THE PREVENTION OF INSANITY DUE TO CONGENTIAL DEFECT.

Of the 652 males and 444 females annual certified as owing their insanity to this cause, a fair number of them, if their defect was only recognised early—a thing which ought not to be difficult—and such persons, when children, were trained and educated upon physiological principles and under medical advice, a very large number of them might be saved from drifting into insanity.

A very small head, it is well known, is compatible with perfect sanity, and so, too, is an unusually large one. Dr. Clouston says: "The Hydrocepalic variety of Idiocy is very common, but I need hardly say to you that hydrocephalus, with even enormous enlargement and great deformity of the head is perfectly compatible with sanity." (Clouston's Mental Diseases, page 286.) It is, of course, quite true that already a great deal has been, and is being done to care for such children as these, that is children not actual idiots, for these latter come under the provisions of the Lunacy Act, and are sent in large numbers to the various asylums for idiots at Colchester, Darenth, and other places. A very good account of what has been done in this direction was given by Dr. Fletcher Beach in his presidential address at the annual meeting of the Medico Psychological Association of London in July, 1900. After having described the nature and extent of the efforts in other countries, he then comes to our own. "It was not,," he says, "until 1892 that special classes for these children were established in England, the first of the kind being opened at Leicester in connection with the School Board. Later on in the same year the London School Board established schools of Special Instruction for

children who could not be taught by the ordinary methods, and Mrs Burgwin, who had been for some years a teacher under the Board, was appointed Superintendent. Under her direction fifty-three schools have been opened, and there are now between 2,000 and 3,000 children who are being speci-The Metropolitan Asylums Board has ally instructed. opened a home for twenty children, and others are in con-The children attend the special classes, and templation. there is, therefore, more individual care, and better training than they could have in Poor Law Schools. In the provinces, too, special classes have been opened, for, besides the one at Leicester just alluded to, classes are in operation at Birmingham, Bolton, Bradford, Brighton, Bristol, Burnley, Bury, Nottingham, and Plymouth.

Some private educational homes have also been instituted during the last few years for patients belonging to a higher social class, who also require special methods of education. ("Journal of Mental Science," October, 1900, page 639.)

Again: "For some years past small homes have been established by philanthropic ladies for the reception of feeble-minded girls, in different parts of the country, and the Metropolitan Association for Befriending Young Servants has opened one at Hitchin.

From statistics which had been prepared it was found that many girls, on leaving public elementary schools at the age of 14, or Poor Law schools at the age of 16, were apt to go wrong, not because they were vicious, but, being simplehearted and mentally feeble, they were taken advantage of by evil-doers, and at last came into the Workhouse to be delivered of a child. In some cases the same girl would come into the Workhouse again and again for the same purpose, there being no power to detain her. Many ladies becoming acquainted with this state of affairs, opened homes, into which these girls have been received, and trained in laundry, domestic, and other industrial work. There is no power of detention, but there is no necessity for it, for their lives are rendered so happy that they do not attempt to In 1806 the National Association for Promoting the Welfare of the Feeble-Minded was formed under the presidency of the Duchess of Sutherland, and the chairmanship of Mr. Dickinson, Chairman of the London County Council, in order to co-ordinate these scattered institutions, and to endeavour to arouse public interest in these cases. Since its formation this Association has opened four homes near London, two of these being for adult girls, one for grown-up boys, and one for children, who are trained in the same method as those who attend the special classes. Including these homes there are now no less than fifteen which carry on this useful work, and as they are certified by the Local Government Board, and visited by their inspectors, an! in the case of the four houses just mentioned by consulting physicians, specially appointed for that purpose, we may be quite sure that the arrangements made for the comfort and welfare of the inmates are as perfect as possible." (Ibid October, 1900, pages 640-641.)

More useful institutions than these it is difficult to imagine and nothing is more likely to lessen the annual number of cases of Insanity arising from Congenital Defect. Those, however, in earnest about the matter should not be satisfied with attempting to mitigate the effects of Congenital Defect, but should try to prevent any such defect being transmitted as pointed out in previous parts of this essay. In the majority of cases it is undoubtedly owing to some imperfection in one or both of the parents—generally, I should say, either Heredity or Intemperance—and their unfortunate children have to thank them for this legacy. Thus it is only an additional reason for a stronger crusade than ever against the marriage of tainted persons, and a further illustration of the vital importance of all married people, at all events, leading good and temperate lives.

THE PREVENTION OF INSANITY DUE TO ADVERSE CIRCUMSTANCES (INCLUDING BUSINESS ANXIETIES AND PECUNIARY DIFFICULTIES).

Nearly 1,000 people become insane every year from these causes, and the treatment is very similar to some others I have considered, namely, domestic trouble and worry. Of course, if the circumstances are very trying, the unfortunate individual cannot help feeling very worried and distressed, but when such an one finds that it is so affecting his mental health that he is becoming irritable and melancholy; that his memory is going, and that he is losing his appetite and his sleep, then he should bestir himself and say: "No more of this. If I continue in this way I shall become insane. This would be unjust both to myself and my family, and as, moreover, I have done my best, and can now do no more, and whatever the dis-

grace, I shall yet live to get over it, I will worry no longer and no more but await the worst with equanimity." People know that this is the right method to pursue, and yet do not follow it. If they only did so far fewer people would become insane annually through "Adverse Circumstances."

THE PREVENTION OF INSANITY DUE TO CHANGE OF LIFE.

Of the 629 women who annually become insane from this cause I am quite sure that a very large proportion could be prevented from becoming so if they only took more care of themselves at this critical period of life. When this time has come, as shown by the cessation of menstruation, and the appearance of such symptoms as giddiness, hot flushings, and uneasy sensations in various organs of the body, every woman who is desirous of retaining her mental soundness should be careful to keep the skin and bowels well acting, to avoid as much as possible all sources of worry and excitement, and, in order to combat the malaise and mental depression which at this time are so apt to occur should take plenty of outdoor exercise. Dr. Clouston lays special emphasis on this last point, and he also has a high opinion of the value of iron as a preventative.

Of course a certain number will become insane in spite of all precautions and treatment if there is a strong hereditary tendency, but if only the number can be lessened it is worth the effort, and this, I am sure, can be done.

THE PREVENTION OF INSANITY DUE TO PARTURITION AND THE PUERPERAL STATE.

If any form of Insanity is particularly regrettable and painful, and therefore worth preventing, surely this form is. No wonder that Dr. Clouston says: "I do not know of any event that can occur in a family short of death that is so great a shock to all who have to do with it than for a new-made mother of a first-born child to become suddenly maniacal, and require to be sent to an asylum. One of the most joyous institutions of life is made full of fearful anxiety, and the strongest affection on earth is then often suddenly converted by disease into an antipathy; for the mother not only forgets her suckling child, but often becomes dangerous to its life." (Clouston's Mental Diseases, page 561-562.) Seeing that out of the 576 cases which occur annually, in 515 of them this is said to be the real exciting cause, and only the predisposing cause in 33 (in 28 of them it was impossible to determine which it was).

this means that so long as people are hereditarily predisposed to insanity (and Dr. Clouston found that there existed an hereditary tendency in nearly 52 per cent. of his cases where the point could be ascertained, and was sure that it existed in a good many more if only the facts could have been accurately ascertained), such cases are bound to occur. The great preventive remedy if the disease is to be substantially checked, is the one I have so often had occasion to allude to before, namely, to discourage and prevent if possible the marriage of tainted persons. If, however, such persons persist in marrying and having children, then the next best thing to be done, so it seems to me, is, when this tendency is known, to keep the mother during the whole period of her pregnancy, and especially as the time of her delivery approaches, as free as possible from excitement of all kinds.

As, moreover, the pains of labour, exhaustion, loss of blood, and septic poisoning are also rightly believed to be sometimes important factors in the production of the disease extra precautions should be taken by the medical man or nurse in attendance, although it seems almost needless to say that with such a patient a medical man, and not a nurse, should always have the management of the case, and in this way many of these poor women might possibly be saved from such a regrettable fate.

As regards the predisposing causes in these cases, Dr. Clouston says: "Poverty and want of proper attendance during child-birth, and having to get out of bed and to work too soon I have seen bring it on. The shame and mental distress usually attending the birth of illegitimate children make it twice as common then as after the birth of legitimate children. I have several times seen a sudden mental shock act as the proximate cause of the disease in women who seemed to be doing well in child-bed. I once saw the news of the death of the patient's father send a woman, in the second week after confinement, into acute mania within a few hours." (Ibid page If the fact is correct that unmarried women fall victims twice as often to this disease as do those in lawful wedlock, then it would seem to indicate that mental and moral causes have a greater influence in the production of this disease than they are generally credited with, and the proper preventive measure would appear to be that which I shall recommend further on in another and kindred form of insanity, namely, to treat poor young girls who thus "go wrong" with kindness, sympathy, and charity, and not in the harsh cruel manner which society and their own parents often do. As regards mental shock, such as is conveyed by bad news, it would seem preposterous to point out that any person conveying such intelligence to a parturient woman till she has passed the critical period would be guilty of such obvious indiscretion that no one, one would think, but a lunatic would do such a thing. Other points important to remember are that it is in first confinements that this unfortunate occurrence is most apt to take place (one third of the cases occur then) and that the first fortnight, and especially the first week after the confinement, is the most critical time.

When this period has passed the risk is considerably less, and, after a month, may be practically discarded altogether. Relatives, friends, and acquaintances, therefore, should reremember these facts, and always allow a relative, friend, or neighbour, who they have seen by the newspapers has had a child, a full month's quiet rest before essaying to call upon her. In this way they will have the satisfaction of knowing that they are doing their little share in trying to lessen the annual number of victims to Insanity.

THE PREVENTION OF INSANITY ARISING FROM VENEREAL DISEASE.

The number of cases of Insanity attributed to this cause is not very large, but the form that it almost invariably causes or has a part in causing is the very worst, because a most incurable form, namely, the disease known as General Paralysis of the Insane.

Concerning this disease Dr Percy Smith, in his Presidental address before the Psychological Section of the British Medical Association at its annual meeting for 1900 thus delivered himself:—" There can, I think, be very little opposition now to the statement that acquired syphilis is one of the most potent predisposing causes of general paralysis. While some observers hold that in every case of general paralysis, if the history be carefully taken, some evidence of syphilis will be found, the great majority recognise at least that even if a history of syphilis cannot always be obtained, at any rate such a history is to be found in cases of general paralysis very much more frequently than in any other forms of mental disease, and I intend to regard this preponderance of a history of syphilis in cases of general paralysis as an established fact, and to lay

down the proposition that if there were no syphilis there would be very little general paralysis. Evidently in males at least general paralysis is a most serious cause of death in asylums, and, moreover, it kills those chiefly who are in the prime of life. It is, therefore, most important that no stone should be left unturned to stay this waste of life. ("British Medical Journal," August 11th, 1900.) He then makes the suggestion that in order to prevent this terrible malady, General Paralysis, the disease which most commonly causes it, namely, Syphilis, should be controlled by the Legislature, or, in other words, that Syphilis should be made a notifiable disease, and that any doctor coming across such a case must report it to the Local Health Authority just as he does now cases of Scarlet Fever, Diphtheria, etc.

He feels that if this were only the case there would be considerable diminution of Syphilis, and, therefore, of General Paralysis. He finally concludes with these remarks: "In my opinion general paralysis should be looked upon as a preventable disease, and I feel strongly convinced that were syphilis controlled this truly malignant degenerative disease of the nervous system, which at present seems to defy all treatment, which adds so largely to the deaths in asylums, which mainly affects men in the prime of life, and which may also affect their children by means of hereditary syphilis, would to a great extent disappear." ("British Medical Journal," August 11th, 1907.)

I share his views fully, and certainly approve of his idea

I share his views fully, and certainly approve of his idea that the Legislature should act in the matter firmly, believing that such action would diminish considerably the amount of Syphilis in the community, and therefore reduce substantially the average number of cases of General Paralysis.

THE PREVENTION OF INSANITY DUE TO ACCIDENT OR INJURY.

After any serious injury to the head whenever there is any hereditary tendency to insanity, the injury is not at all unlikely to bring it out. Much, however, could be done to lessen the number of such occurrences if only, when an accident to this part of the body occurred, people regarded it more seriously than they generally do.

In a head injury, if there is a large outside wound, the tendency is to regard it as serious, whereas, if the outside wound is small, no anxiety is manifested. Of course when

the injury to the brain is immediately apparent, as evidenced by unconsciousness, convulsions, or other serious symptoms, the alarm is great enough, but I am not referring to these cases, where no warning is required, but to those other numerous cases where a fall on the head occurs, there is little or no external wound, and the immediate brain symptoms are either

none at all, or only slight.

In these cases there is a great tendency to make very little of the accident, whereas really it ought often to be regarded seriously. Indeed, an eminent surgeon, Mr. Bryant, has laid it down as an axiom that an injury to the head, however slight should always be regarded as serious, and treated so. It would be well if this advice were only taken, as falls of babies from their nurses' arms, and the accidents of boys and girls in school playgrounds, and bicycle falls, are without a doubt responsible for a good deal of the insanity which comes under this head. The insanity may not, it is true, appear for many years after, but it is none the less owing to it, and the Epileptic variety of Insanity especially so. Parents, then, when accidents of this sort happen to their children, should regard them with the seriousness they deserve, and, however slight the external wound, even if only a superficial cut, if the nature of the accident has been such as to shake and injure the delicate contents of the skull, the possibility of trouble arising later should be borne in mind. Thus a doctor's advice should be sought, and sedulously followed, but if no medical man's advice is sought, rest in a darkened room for two or three days, with cold applications to the head, would be wise steps to take in the case of any child who had sustained any injury, however slight, of the nature I have just described. If this were only the rule instead of as now, the exception, the probability is that the number of cases of insanity arising annually from this cause would be materially diminished.

THE PREVENTION OF INSANITY DUE TO RELIGIOUS EXCITEMENT.

As I have hinted before my own personal opinion is that religious excitement so called would be very seldom productive of insanity, unless there were already present some hereditary or natural tendency thereto.

Those, therefore, hereditarily predisposed to the malady, or of a neurotic temperament should certainly avoid excitement of this kind. They may be as religious as they like in a quiet way, but they should avoid such occasions of danger as

the following: — They should not, as a rule, go to revival meetings such as are held by the Methodists, and if particularly unstable, should not go to hear any preacher, however distinguished if noted for his sensationalism and fondness for his appeal to the emotions, such for instance as the Catholic Clergyman whose sermon is described in the following passage:—"The subject was Hell, and to heighten the colouring of the frightful picture which the speaker had traced he took a skull in his hand, and having raised a question as to the abode of the soul to which it belonged, he exclaimed, invoking it: 'If thou art in Heaven, intercede for us; if thou art in Hell utter curses.' He then cast it off from him with violence."—(Hood's Statistics of Insanity, page 45).

Little wonder is it that preaching such as this should in those hereditarily predisposed, or of the neurotic temperament, lead to insanity. This particular sermon seems to have had this effect in at least one case, and as the writer who gives it sensibly remarks: "Strong emotions excited by vehement preaching, produce continually in females and very sensitive persons fits of hysteria, and in those who are predisposed to mania there can be no doubt that similar causes give rise to attacks of madness!" (Hood's Statistics of Insanity, page From this, however, it should not be deduced that I disapprove of such preaching—for I certainly do not—but only maintain that persons of a peculiarly sensitive disposition should Rather, indeed, than finding fault with such a stay away. preacher I admire him, for his is sometimes the only way to draw the careless and erring to see the sinfulness of their conduct, and it is much to be deplored that our race contains people of so neurotic a temperament, or so handicapped by hereditary taint that they are unable to go and hear a sermon of this sort without the risk of losing their reason. It is only another argument for dealing with this question in the way I have laid down in the beginning of this essay, namely by preventing the marriage of tainted persons. If this were only done there would, as I have said before, be soon a considerable diminution of insanity, the neurotic temperament would gradually disappear from amongst us, and in the next century preachers would be able to preach as they like, and depict the terrors of hell with all the graphic powers of description at their command without there being the least risk of their sending any of their hearers insane, and religious excitement as a cause of insanity would very seldom have to be entered on our Asylum Registers.

THE PREVENTION OF INSANITY DUE TO PUBERTY.

Of the 293 young people who become insane annually from this cause, in a large number of instances it is the predisposing cause only, and the exciting cause is something else, probably over-study or self-abuse. In the case of nearly half of them Puberty per se appears, according to the Commissioners' Tables, to be the exciting cause. When this is really the case, and there has been no over-work nor unnatural vice playing any part, then it is difficult to see what can be done to prevent the calamity, for if the mere onset of the change called Puberty, in which the boy develops into the man, and the girl into the woman, is of itself sufficient to produce insanity, it surely means that the disease was latent in the system before, or, in other words, that the insanity is due to heredity. I have very little doubt that this is so, and yet as some young people, although hereditarily disposed, might go through life and all the natural physiological changes without losing their mental balance, if only injurious factors were eliminated, I would strongly urge parents who have reason to fear the development of this disease in their children to exercise the most sedulous care regarding them when at or about this age in the following particulars:—(1) To see that they are not over-worked at school or college; (2) to take the necessary steps to warn them against, and prevent them falling into the vice I have before alluded to; (3) to see that they lead at this time regular lives, and, if girls, that they specially warn them against reading exciting novels, frequenting theatres too much, and lastly (4) as regards girls, that their mothers see that the menstrual function is properly established, and, another thing, when established, that it takes a proper and regular course, for irregular or suppressed menstruation is, I am confident, more frequently than is suspected, if not the actual exciting cause of insanity in an otherwise healthy girl, very frequently indeed the cause in one hereditarily predisposed to the malady.

Finally, as bearing upon this subject, and on account of the high standing and great experience of the writer, and not because, personally, I have any opinion to offer one way or the other, I quote the following paragraphs from the work of Dr. Clouston. Writing upon the Insanities of Puberty and Adolescence, and speaking about the prevention of these diseases in children with a strong neurotic inheritance he says: "My experience is that the children who have the most neurotic

temperaments and diatheses, and who show the greatest tendencies to instability of brain, are, as a rule, flesh-eaters, having a craving for animal food too often, and in too great quantities. I have found also a large proportion of the adolescent insane had been flesh-eaters, consuming and having a craving for much animal food. It is in such boys that the habit of masturbation is most apt to be acquired, and, when acquired, produces such a fascination and a craving that it may ruin the bodily and mental powers. I have seen a change of diet to milk, fish, and farinaceous food produce a marked improvement in regard to the nervous irritability of such children. And in such children, I thoroughly agree with Dr. Keith, who in Edinburgh for many years has preached an anti-flesh crusade in the bringing up of children up to eight or ten years of age. believe that by a proper diet and regimen, more than in any other way, we can fight against and counter-act inherited neurotic tendencies in children, and tide them safely over the periods of puberty and adolescence."

THE PREVENTION OF INSANITY DUE TO FRIGHT AND NERVOUS SHOCK.

There is no doubt that there would be far less insanity from these causes if nurses were only more careful not to frighten children by telling them eerie tales just before going to bed, and if young men did not frighten little boys and timid little girls by suddenly confronting them with their faces covered with hideous masks, customs which seem to have grown up of late years, and to be on the increase. On a very sensitive boy or girl, especially where there is any hereditary tendency to insanity, the effect of this is sometimes to unhinge the mind almost on the moment, but more frequently the effect is not apparent till some years later. Of course fright occasionally is unavoidable, as in the accidental occurrence of fire or some other casualty, and when this is the case, needless to say, for some time afterwards any sensitive person apparently greatly upset should be carefully treated by complete brainrest and appropriate brain sedatives. But in those cases where it is avoidable, it should be considered a wicked and criminal act, and one for which those perpetrating it ought to be adequately punished. "Nervous Shock" is, of course often synonomous with "Fright," but in those cases where it is not, as, for instance, where it means the reception of sudden bad news, such as the death of some relative or friend, the failure of some speculation, the stoppage of a bank, the arrest of a son, or any equally disquieting intelligence—all of which are more than sufficient to upset many even normal brains, much less those predisposed by heredity to unsoundness—when news of this sort has to be conveyed, needless to say, it should be done with the greatest discretion and caution, and sometimes, as, for instance, when the person concerned is in delicate health, it should be even with-held for a time altogether. If only this course were always adopted, I am quite sure that insanity from this cause would soon undergo considerable diminution.

THE PREVENTION OF INSANITY DUE TO LOVE AFFAIRS (INCLUDING SEDUCTION.)

If there were no hereditary taint affecting the community so largely, but which, as I have more than once pointed out, is constantly and in a wholesale fashion affecting it although not always apparent, there would, I believe, be as complete a disappearance of insanity from this cause as from religious Of course, where there is seduction as well as excitement. an ordinary love disappointment, the shame and remorse are so terrible and deep that they shake the mental and nervous system to its foundations, and when to this is added the too frequently relentless treatment meted out to the unfortunate person by parents and relatives, as well as the wholesale ostracism by the community in which the poor erring young woman happens to live, it is little wonder that if any hereditary taint exists, all this should bring it out. A time will come, I believe, when as I have said before, by forbidding people marrying insane partners, or at all events preventing them from bringing tainted progeny into the world, young women will be able to stand this as any other trial of the nervous system almost with equanimity. Till such time arrives, however, if insanity from this cause is to be prevented, I would urge it to be the bounden duty of parents to be more lenient to an erring daughter, and society generally to be more charitable. deserted by her lover is punishment bad enough, but to know that the whole world, including her own parents, who not improbably have also turned her from their doors, are pointing the finger of scorn at her is enough to upset the mental balance of the strongest man, let alone of a poor frail girl. As a last word, then, if it seems too much to expect the world generally to condone this offence—although it seems very little to ask in this Christian country—let me warn parents who act in this

way to a daughter who has for the nonce wandered from virtue, that apart from the question of the inhumanity of such punishment as they are inflicting, is it wise to run the risk of punishing themselves also? In other words, their daughter is now only the victim of remorse and disgrace, do they wish to punish her and themselves too by making her the victim of Insanity? As regards ordinary love affairs and disappointments to which young men and women are subject, and which are so familiar to us all, individuals thus stricken should remember the old adage "that there are always as good fish in the sea," and should console themselves accordingly. If, however, they are unable to succeed, and refuse to be comforted, they should try a change of scene, and, if possible, foreign travel, and instead of fretting away their lives in profitless grief, should, as soon as possible, find someone else upon whom to bestow their affections. If they only did this at least a few young people of both sexes would be saved annually from insanity, and instead of becoming inmates of an asylum, might become happy husbands or wives, and good and fond parents.

THE PREVENTION OF INSANITY DUE TO SEXUAL SELF-ABUSE.

If the evils of this unnatural vice were only explained to young people, and especially to boys—as undoubtedly they ought to be—about the age of puberty, it would, I believe result in the habit either never being indulged in at all, or else being checked at the outset, and before it has had time to do incalculable harm. In nearly every case the habit is indulged in through ignorance of the baneful effects sure to result, and hence I would make the practical suggestion that at the age of puberty every boy, or if not every boy, any and every boy, who shows by his outward demeanour, which he almost always does, that he has commenced the practice should either have the danger explained to him by his father, or else, if from over-modesty or other reason the latter does not feel equal to the duty, by placing in his hands some short, discreet, and sensible treatise on the subject, such as that by Dr. M. C. Hime entitled "The Schoolboy's Special Immorality." The author of this work was for many years the headmaster of a large college, and his work has received the highest commendation from the Bishops of the English Church, the

Religious newspapers, and the leading English Medical Journals.

As regards the pamphlets published and scattered abroad by charlatans on this subject, I only mention them to express my condemnation of them. Their sole object, indeed, is that of frightening their victims so as to make money out of them. With respect to these people and their ways, Dr. Clouston says: "That such abominable suggestions of evil should be allowed to be scattered broadcast into the families of decent people is to me one of the standing marvels of our social life. They do and can do no good to anyone; they aggravate the miseries of those who are suffering from the minor effects of this vice by keeping them constantly before their minds; they suggest evil thoughts to those who might be free from them, and they fatten the vilest of mankind. I verily believe, and I speak from some experience, that there are about as many people made insane by these advertisements as by the habit of masturbation itself." (Clouston's Mental Diseases, page 493.) Without going so far as this there is no doubt that they do real and wholesale harm, and that the police-authorities should be more active than they are in preventing their The subject, indeed, is such a disagreeable one that it should not be discussed at all, except by clergymen, moralists, and physicians, and as no good can be done by going in a work of this sort, into more minute details, I rest satisfied with pointing out the danger of the practice as a cause of insanity, and having at what I believe to the best preventive means against the vice, and finish with the subject accordingly.

THE PREVENTION OF INSANITY DUE TO FEVERS.

As has been stated before, it is doubtful whether the number of cases put down as due to Fevers is not exaggerated.

Nevertheless that fevers of various kinds are able to cause, and sometimes do cause insanity is undeniable. Sometimes they are the predisposing cause, sometimes the exciting, and sometimes the two causes cannot be differentiated. To guard against the occurrence of insanity after fever two things are worth remembering. First, any mental symptoms, as shown by delirium, etc., and manifesting themselves during the course of a fever should be promptly and energetically treated and prevented if possible from becoming chronic; and secondly, convalescence after fever should receive more attention than it sometimes does. In the case of the rich or fairly well-to-do,

where expense is no consideration, such attention is, as a rule, given, but in the case of the poor it too often happens that as soon as the acute symptoms have subsided, and the fever, strictly speaking, has gone, the doctor's visits are discontinued, and the patient is left to convalesce as best he may. doctor, it is true, on being told that his services will not be required further, generally gives a few useful instructions as to feeding, guarding against cold, etc., but how often it happens that they are taken little, if any notice of! Thus a child, after Scarlet Fever, or an adult after Typhoid or Typhus, is frequently removed from medical care long before he ought to be, and as, in such circumstances, there is not infrequently marked anaemia, a disordered nervous system, and debility of the system generally, it is hardly surprising that the brain, like any other organ, occasionally suffers, and the patient becomes insane in consequence. If Insanity, then, is to receive a diminished number of annual victims from this cause, not only must the greatest care be exercised during the acute stage of Fever, but when the convalescence stage has been reached a good holiday, tonics, cod liver oil, sanatogen,* and other suitable adjuncts according to the needs of the case, should, whenever needed, be insisted upon, and the person not be allowed to return to his work till he is thoroughly himself again. Especially, too, should the necessity for this be laid stress upon where there is any hereditary tendency to insanity.

THE PREVENTION OF INSANITY DUE TO PRIVATION AND STARVATION.

In a country such as ours, with an organised system of poor law relief, both indoor and outdoor, it is surprising that over 100 men, and 91 women become insane annually from these causes, for although the fare provided at our Workhouses is not luxurious, it is at least enough to nourish the body and brain sufficiently to prevent such an occurrence as starvation. With out-door paupers, however, this is not the case, for to my own knowledge, in some Unions, only 2s. 6d. weekly used to be allowed to aged women, and 2s. 9d. to aged men, and to expect any man or woman, out of such a small sum, to pay for house-rent and coal, and then to provide themselves with sufficient nourishing food is obviously impossible, and hence it must be, I expect, from these poor people

^{*} I have found this preparation most useful in all forms of incipient insanity where the symptoms are due to brain anaemia.

that many of those certified as owing their Insanity to Privation and Starvation are derived. Others, again, no doubt, are cases where, owing to pride, a poor person here and there undergoes such privation that insanity claims him or her for its victim before pride gives way. The remedy I would suggest in these contingencies is the following:—

I would suggest in these contingencies is the following:—
With regard to the first, I would suggest that the scale of outdoor relief should be higher, and with regard to the second I would remove the stigma at present attaching to the receipt of relief from the rates, and thus encourage persons who really need it to apply oftener and earlier. If these suggestions were only adopted I am quite sure that insanity from these causes would be considerably lessened.

THE PREVENTION OF INSANITY DUE TO SUNSTROKE.

Without discussing the question as to whether so large a number as 138 people—the number attributed to it in the Commissioners' tables—become insane annually from this cause, it is certain that no inconsiderable number do, and hence whenever a person, either in this country or a foreign one falls a victim to sunstroke, such a possibility should always be borne in mind, and the greatest care be exercised in treating such a case. If the case is severe, and life threatened, a medical man, when obtainable, is, of course, always called in, who will not probably leave the patient till the temperature has fallen, and consciousness been recovered. When this is the case the patient's friends are usually satisfied, and generally nothing much more is thought of the matter. Indeed, it is only when, perhaps some time after, loss of power of mental concentration and failure of memory occur, which, according to Dr. Osler, is not uncommon, that the case again attracts notice. The lesson I want to impress, then, is, that as it is impossible to say at the outset regarding any case whether bad results are likely to happen or not, it is always best to regard sunstroke exactly as it has been strongly suggested that injuries to the head should be regarded, namely, to look upon every such case as one which may possibly have most serious results, and act accordingly. Thus, after any case of sunstroke there should be complete mental rest for a month or two-longer if the symptoms appear to indicate it-with a light diet, and no alcohol; exposure to the sun should for the future always be specially guarded against by bearing a proper head-shade; if in a tropical country the person should at once return to England or some temperate climate, so as to prevent any possibility of a recurrence, and lastly, and most important of all, the person attacked should for the rest of his life either be a complete teetotaler, or else should take only the smallest quantity of alcohol in any form. If only the above rules were universally observed, or even only some of them, it is not too much to say that a good many cases of sunstroke would have no bad results at all as regards adding to the annual roll of victims to Insanity.

THE PREVENTION OF INSANITY DUE TO SEXUAL INTEMPERANCE.

As has been said before, this is a delicate subject to dilate upon, but that 138 persons annually should become insane from this cause—and in 88 of them this is stated to be the direct existing cause—seems to me a blot upon our civilisation, and I only mention the matter in the hope that those who from motives of religion and morality will not avoid excess may be induced to do so when they learn that no very uncommon penalty for transgression is the onset of an attack of insanity. For the benefit of any desirous to reform in this particular I would commend as helpful the practical and sensible suggestions on the subject of sexual restraint by the able writer and physician from whom I have before quoted so often, namely, Dr. T. Clouston, and with nearly every word of which I thoroughly agree. He says: "It is strange that the physiological inductions the old Catholic Church as to the dietetic management of the nisus generativus and its volitional control have been so neglected by modern physicians, founded as they were on the experiences of the terrible conflict with nature that was implied in the early Christian theory that sexual desire was more or less of the devil, and should be eradicated, and not merely regulated by all men who wished to attain a high religious ideal, and on the experiences of the later rule of priestly celibacy. My own belief is that the Catholic view of repression and eradication being, for the sake of argument, granted, almost every rule of the church as to food and fasting, and every practice of the monastic orders, and every conventural regulation, is a correct physiological principle. lated from religious into physiological language, they may be summed up thus—Strengthen the power of inhibition, bodily and mental, practise the habit of mental concentration and abstraction from certain lines of thought. Cultivate enthusiasm about ideals, find ideal outlets for the effective and social faculties other than sexual choices. Sleep only under such conditions and so long as to recuperate lost energy and tissue, not to accumulate energy that there might be a difficulty in getting rid of short of sexually. Eat only non-stimulating and fattening food, and that in moderation, with periodic abstentions to use up spare material in the body. Avoid flesh as the incarnation of rampant, uncontrollable force, sexual and otherwise. Be much in the open air, and work hard. Finally so fill up and systematise the time that none is left for day-dreaming." (Clouston's Mental Diseases, pages 498 and 499.)

THE PREVENTION OF INSANITY DUE TO LACTATION.

To prevent insanity from this cause—and it is worth trying to prevent, as 127 women lose their reason annually during the nursing period, and in nearly a hundred of them this is said to be the direct exciting cause of the malady—the indications are clear. Every nursing mother should have the most abundant supply of good nourishing food; the sickly and weak should not nurse their children at all, and further, if there are signs that for any reason, or in any way, the process is injuring the mother, that is to say, if, to use the words of Dr. Clouston: "The organic delight of suckling her infant, and which the maternal nature craves and is satisfied by the process becomes an irritation and excitement, and an exhaustion," then the nursing should be discontinued, and either a healthy wet nurse procured for the child, or a good and modern infant's feeding bottle be obtained, and cow's or goat's milk given. Poor people, I know, cannot afford a wet nurse, and mothers generally have a great aversion to bringing up children "on the bottle," being under the impression that they are not likely to thrive and prosper. This impression is utterly unfounded, for many years' experience in practice justifies me in saying that children, as a rule, do quite as well when brought up by hand as "at the breast," provided only the milk provided is good, and in these days, when milk dealers are compelled to supply the pure article, and to preserve it under sanitary conditions, it must now be the exception to get it otherwise. Even, however, if it were not so, surely it is asking too much to expect the mother to risk her sanity, and perhaps her life, and this utterly unnecessarily, for the sake of her offspring! Common sense not only supports this view, but also indicates the folly of acting otherwise, for if a mother is in the state of health I have described, how can she expect her milk, under such conditions, to be good and healthful for her child? If people were wiser in this matter, and only strong and healthy mothers nursed their young, the weak and sickly declining the task, the number of cases of Insanity from this cause would, there is no doubt, soon considerably diminish.

THE PREVENTION OF INSANITY DUE TO PREGNANCY.

It is a great pity that women cannot conceive without running the risk of becoming insane. In a perfectly healthy woman there certainly ought not to be the slightest risk, for it is a natural process, and one for which woman obviously and admittedly was created. How, then, is it that every year over 100 women become insane apparently for no other reason than that they consented to become wives and mothers? The answer is not difficult, for it is the same as has had to be given over and over again during the discussion of this subject, in a word, it is exactly what might be anticipated, namely, the disastrous effects of heredity. This being the case it is evident that until this evil is treated at its source, either in the fashion suggested in these pages, or in some other better way, many women can only become pregnant with a distinct risk of losing their reason in consequence. The prospect is a sad one, but that it is real the English Commissioners' Tables show. Hopeless altogether, however, as it is under present conditions to look for the complete prevention of insanity from this cause a good deal can nevertheless be done to lessen the number of victims. In some of the cases, for instance, even if there was an hereditary taint, if other causes were absent no mental breakdown would result. What these other causes are has been mentioned in another part of this work, and whilst some of them are not preventable, others certainly are. Grief, such for instance, as is occasioned by the death of a relative or friend, and which sometimes acts so disastrously, is, of course, not preventable, because death must occur. Grief, however, caused by the persistent misconduct or cruel treatment of a husband or son, should often be preventable. again, as regards worry and excitement; surely these things are at times preventable, even if sometimes not. When they are, needless to say, a pregnant woman should be spared them, for each and every one of them is capable of proving the factor which shall determine whether a woman whose mental stability

is threatened by the process of pregnancy shall pass through it with the retention of sanity, or add her name to the long list of those where pregnancy has spelt insanity, and what ought to be an event of rejoicing to all is thereby turned into one of the greatest misfortunes for the victim herself, and full of pain and sorrow for all her friends and relatives.

Let, then, any husband, child, or relative, however unfeeling in conduct to wife, mother, or friend, at *other* times be parcicularly sympathetic and gentle in the treatment of a woman who is pregnant, for, if not, and should such an unhappy result as I have described ensue, it will be on their conscience that it was perhaps their unkind and cruel treatment which determined the sad catastrophe.

As regards those cases, which occasionally occur, where, with each pregnancy there is a regular recurrence of a mental breakdown, undoubtedly such women as these should cease from child-bearing altogether.

THE PREVENTION OF INSANITY DUE TO OVER-EXERTION.

This is so rarely a cause of insanity—as I have hinted before, probably not even really accounting for the small number (50 males and 23 females), with which it is credited—that it is hardly worth mentioning. In fact it is my own opinion that it could hardly, if indeed ever, cause the disease unless the person was already predisposed to it—yet another proof of the urgent necessity of dealing with the prevention of this malady at its source, that is by forcibly and effectively grappling with the problem of heredity.

THE PREVENTION OF INSANITY DUE TO UTERINE AND OVARIAN DISORDERS.

In an earlier portion of this book there have been stated the reasons for the opinion that these affections are far more commonly the cause of Insanity than the Commissioners' Tables appear to show. As Dr. Clouston says: "The regular and normal performance of the functions of the uterus and ovaries is of the highest importance to the mental soundness of the female. Disturbed menstruation is a constant danger to the mental stability of some women; nay, the occurrences of absolutely normal menstruation is attended with some risk in many unstable brains." That this latter remark should be correct is extremely regrettable, and only furnishes another reason for attempting to deal with this malady at its source, for if there were no neurotic or hereditarily insane temperaments the performance of a natural function such as this would

not be attended by the risk of any such serious consequences. But if the consequences are sometimes serious, and the risks not to be despised even when the function is performed properly, no wonder is it that when performed improperly, irregularly, or not at all, the risks should be far greater. With truth indeed does the writer from whom I have just quoted make the remark that the "regular and normal performance of the functions of the uterus and ovaries is of the highest importance to the mental soundness of the female."

If, then, insanity is to be prevented from this cause, mothers should see that menstruation is commenced at the proper time, and, when commenced, is performed properly and regularly. Of course the function does not always commence at the same age, and even with members of the same family there is often a wide difference. There should, however, be very little difficulty in deciding when the proper time has arrived, for there are certain signs and symptoms which are familiar to every medical man, and if menstruation is late in appearing, medical advice on the point should always be obtained. If the proper time has arrived, the medical man will be able to prescribe remedies which will help forward the function, and if it has not he will be able to definitely say so. Again, where the performance of the function has commenced, but from some cause or other has either ceased, or is improperly performed, the need for skilled advice is equally important, and no mother should rest contented till she sees that the matter has been rectified. So far I have been speaking only of disordered menstruation from some simple derangement of the health; needless to say, where there is real disease in the uterus or ovaries, treatment is more important still. Apropos, asylum physicians may dispute as much as they may regarding the exact importance of the part that these diseases play in the production of Insanity, as was done some years ago at the Psychological Section of the British Medical Association, but that I am correct I know, and every medical man who has been engaged for any length of time in general practice, and has not spent his whole lifetime in purely asylum work, will thoroughly bear me out.

The discrepancy, then, in the testimony of two such able medical men as Dr. Percy Smith, an Asylum Superintendent, on the one hand, and Dr. McNaughton Jones, an obstretic physician, on the other, at the annual meeting of the British Medical Association, is easily to be explained, for whilst Dr. Smith, from his experience stated that in asylums "in only a

small proportion of cases was the mental disorder due to the sexual organs." Dr. McNaughton Jones, on the other hand, gave it as his opinion "that functional disorders of ovulation are frequently attended by mental aberration, and in a proportion of cases originate the mental aberration," and the same remark, he says, applies to disorders of ovulation, which have

a pathological cause.

But this is about disorders of the ovaries only. If his observations had only been extended to disorders of the uterus as well, a great deal more might have been said. How many cases, for instance, does a medical man in general practice come across where the symptoms, if not actually amounting to insanity, touch closely upon it, and where the sole cause is only some slight disease of the uterus, or perhaps no disease at all, but only some little displacement of that organ? How often does he find, too, that after treating and remedying such a condition all the mental and nervous symptoms disappear, whereas, if such a condition is untreated, the woman

gets worse and worse mentally?

If, then, insanity is to be prevented from these causes—and, as has been stated before, the probable truth is that the number of cases due to them is far larger than the Commissioners' Tables show, and the Superintendents' Reports indicate—any disease or disorder of the kind I have mentioned should be treated and remedied carefully, thoroughly, and promptly. Indeed, I would even go further, and say that in view of the fact that these cases are in women a far more frequent cause of insanity than is generally believed to be the case, in other words, that they are often the cause of the disease, and yet are unsuspected, that unless there are special reasons for the contrary, every woman admitted to an asylum should be carefully examined with a view to ascertaining whether there is any disease of these organs or not. If this were only done I am quite sure that there would be many more annual recoveries than there are at present, and that many who now spend the best years of their lives in asylums, and eventually recover, would, through the true cause of their insanity being detected, and promptly and skilfully treated, be restored to their friends much earlier.*

^{*} In this connection I also take the opportunity of advocating another thing, namely, the desirability of at least one of the medical officers in our county asylums always being a woman, and having this work delegated to her. I am aware that in some of our asylums female medical officers are appointed, but I strongly feel that it should be the case in all.—The Author.

THE PREVENTION OF INSANITY DUE TO "OTHER ASCERTAINED CAUSES.

By a process of exclusion—for nearly all other possible causes have been already mentioned—these must be some such causes as the following:—(1) Opium, Morphia, Chloral, and drug-taking of various kinds. (2) Poisoning by Gas and other noxious vapours. And lastly (3) Lead-Poisoning. As regards the first, namely, drug-taking, this, of course, is not an uncommon cause at all, and although no statistics seem to be forthcoming on the subject, there are, I opine, few large asylums which do not receive annually one or more persons whose mental breakdown is probably owing to indulgence in the habit I have named. Of all the drugs named the taking of Opium in its solid form, as a vapour, or as a drink in the form of laudanum, appears to be the most common. That the inevitable result of indulging in such a habit must sooner or later end in a complete physical breakdown is probably known to all, but that it leads to insanity is not so well known. It is, indeed, in this connection only that I am now considering it, and I warn those who have not commenced the habit never to take it up, or, if they have, to at once leave it off. To do this latter is, of course, exceedingly difficult, especially if the habit has been indulged in for any length of time, but unless the mind is already hopelessly gone, if there is the will to do it, it can be done.

Needless to say there is the same difficulty in overcoming any weakness as regards many other drugs, and the preventive treatment of insanity from these causes resolves itself into the prevention and cure of these habits before their worst effects are reached. Whether in the treatment of these cases there should be the immediate and total stoppage of the drug, or whether it should be reduced gradually, are points about which authorities differ. Dr. Clouston, who has said he has seen many cases of insanity resulting from Opium-eating, holds that it should, whilst others maintain that a gradual stoppage is pre-That as soon as possible, however, it should be left off completely all are agreed, and if the several helps to overcoming any bad habit, namely, congenial surroundings and active occupation, together with nourishing foods, tonics, and moral control, are not successful, treatment by Suggestion may be tried, or by Hypnotism. In this way not only may many persons be saved from insanity, but from much other misery and misfortune as well.

As regards the second occasional cause, I have mentioned, namely, Insanity resulting from the inhalation of some Noxious Vapour, the usual treatment resorted to in such cases by a medical man would probably prevent, in most persons, such a result occurring, and the occasional cases where it does occur must be in persons in whom there is already lying latent a predisposition to the malady. In other words, such persons would really owe their insanity not to the gas poisoning, which would never have brought the disease out of it if it were not already there, but to Heredity. As regards Lead-Poisoning, too, much the same applies, and all workers in lead, painters, etc., if there is any hereditary tendency to insanity in their families, should be extra careful in adopting the usual precautions, such as washing the nails, teeth, etc.

If the Commissioners are correct, there must, of course, be included under "Other Ascertained Causes" several other items, for 247 cases annually are ascribed to these causes, and those I have mentioned do not, I am sure, account for one-fourth this number. As, however, I do not know what these causes are, I cannot, of course, discuss them.

Having now considered from a prophylactic point of view all the causes of Insanity—28 in all—assigned as such in the Commissioners' Report, I will conclude this work with a brief reference, from the same point of view, to the several factors which I have denominated "Influences."

THE CAUSATIVE INFLUENCES OF INSANITY: SOME PROPHYLACTIC CONSIDERATIONS.

About these very little can be said. As regards, for instance, the first in the category, namely, AGE, very little more can be said than that seeing that from 25 to 44 is by far the commonest period of life at which a mental breakdown occurs, people should at this period take special care to avoid the exciting causes, such as Drink, Worry, and Overwork, and that although relatively to the population, the number of young people under 20 who break down is not large, yet that a good number, nevertheless, do, special precautions should be taken about the period of puberty and adolescence to lessen risk; and, lastly, that as the liability to insanity perceptibly decreases after the age of 55 people who have

been accustomed in their imagination to add this to the other probable troubles of old age may dispel their fears, and take comfort accordingly.

As regards SEX, all that need be said here is that owing to the liability of the occurrence of this disease with girls at the period of puberty, and with women at pregnancy and at the change of life, females should be particularly careful at these times, and if the fact that women are not quite so liable to insanity as men disquiets any member of the male sex, although for this there is obviously no complete solace, yet his consolation should be that even if it is so, it is only slightly so, and the fact itself is not altogether undisputed.

With respect to MARRIAGE, as has been seen, this is distinctly unfavourable to insanity, and distinctly favourable to exemption. And this applies almost as much to women as to men, although not quite so favourable to the latter on account of the insanities peculiar to child-bearing. People, therefore, at the marriageable age, who want to place themselves under the best conditions for avoiding this calamity, should choose the marriage state rather than the single life. Those, again, who, for any reason, do not see their way to getting married, should take comfort from the fact that it is not so much a single life that favours insanity, but because those who lead single lives—amongst the male sex—too often lead irregular lives as well. If, therefore, single men will only bear this in mind, and act accordingly, they may, if they so wish it, remain bachelors without much fear of any untoward consequences.

With respect to OCCUPATION a good deal more definite expression of opinion could be given on this point if the Occupation Tables in the Commissioners' Returns, which were originally drawn up in 1880, and were discontinued in 1903, were re-introduced, and a little more attention given to the method of compilation.

As is evidenced from the space devoted to the section on OCCUPATION, when discussing the Causation of Insanity, the writer of this work perused the Tables referred to most diligently, and although he was not able to gather from it all the information he would have liked, yet he was able, nevertheless, to draw from it some very useful and suggestive deductions. They showed clearly, for instance, that as regards the three professions, clerical, medical, and legal, clergymen, and especially Dissenting Ministers

and Roman Catholic priests, are far less susceptible to Insanity than are lawyers and doctors, and that of the two last doctors are far more liable to Insanity than lawyers. The lesson to be learned from this is that anyone having a son of a neurotic temperament, or with an insane hereditary history, should, by preference, if he feels that he must make of this particular son a lawyer, a doctor, or a clergyman, bring him up as a clergyman, and on no account make him a doctor. The Commissioners' Occupation Tables also clearly indicate certain trades as harmful, and others as the reverse, whilst they distinctly bring out the important fact that it is almost as dangerous, if not more so, to have no work at all, as to be engaged in some of the most injurious Trades.

Thus, the lesson to be learnt, of course, is, that anyone predisposed to the disease, should not be placed in any occupation which is likely to develop it. What these occupations are the Commissioners' Tables more or less clearly indicate, but the point is so important that anyone who has a son or daughter of a neurotic temperament, and where there is any real reason to fear the development of insanity, would do well to ask the advice of their medical attendant on the matter.

On this point Dr. Clouston gives some very good advice. He says: "A very important question often needs solution by medical men in practice. There are young people growing up, in the families they advise and attend, with neurotic heredity, manifestly unstable brain constitution, "excitable" dispositions, and nervous diathesis; and the all important question is asked: "How can such persons best avoid the tendency to attacks of mania? They have had patients who have already had attacks of maniacal exaltation, some decided, and some only nascent. How can such be avoided in the If our present knowledge enabled us to answer these questions no doubt there would be less insanity in the world than there is. We cannot do so, surely, but that we can do something in the direction of lessening the tendency of a brain to mania, I have no doubt. Beyond question persons with this brain constitution should not enter on exciting and To take extreme examples, they hazardous occupations. should not be stockbrokers, election agents, or speculators. Quiet routine modes of life suit them best; positions with fixed work and fixed salaries are most desirable for them. Again, I cannot help thinking that for such persons to take to study or to occupations that imply much brain work is a risk, though they have often bright intellects. It seems to me as if, instead of that they should go back to nature and mother earth, and become farmers and colonists. I once knew two brothers, twins, alike in mind and body, who had a strong heredity to mania. They both became medical students, and one had an attack of acute mania at twenty, which ended in dementia. At the beginning of his brother's attack the other had distinct premonitions of the same disease -was sleepless, restless, unsettled, had queer sensations in his head, and felt as if he would lose his self-control. But he at once fled, as for his life, from books and brain work, and went to be a land surveyor in the Far West. His neurotic symptoms passed off, and he grew into a good and happy man. I think it is the instinct of self-preservation that makes young men sometimes fly from the influences of civilisation and take to the backwoods."

And lastly he says: "But what about young women? Alas! the prospect for those with such heredity, and particularly when they are well off, and live in cities, is often lamentable. So far as my experience and observation go, the regulated life of a sisterhood or convent, or systematic religious and philanthropic work, fulfil the conditions of prophylaxis, when the tendency is very strong, better than anything else." (Clouston's Mental Diseases, page 210.)

Thus, beyond the fact that anyone in the middle ranks of society having a son of a neurotic temperament might do worse than bring him up as a clergyman, or a person in a similar station have a daughter inclined for the life of a nun, would do well to allow her to enter into a convent or sisterhood, and that those in poorer circumstances should select quiet regular modes of life for their sons and daughters as they grow up—the quiet routine modes of life which Dr. Clouston suggests—and positions with fixed work and fixed salaries rather than exciting and hazardous occupations, and preferably out-door positions rather than indoor ones even if there is a money sacrifice, beyond, I say, these few deductions, little more can be confidently asserted on this point till fuller and more reliable statistics regarding occupation and insanity are available.

As regards the influence of the SEASONS on Insanity, little more can be said than has been said before, except this, namely that in those cases where a person, who has either been already insane or is known to be prone to insanity, shows a tendency to relapse or to be excited and depressed,

or is in any way affected abnormally in mind at any particular season that extra care and precautions should be adopted at these times.

With respect to the influence of SOCIAL CONDITION—beyond noting the fact that excessive poverty predisposes to the disease, as proved by the high ratio prevailing amongst the pauper class—very little can be said. Even, however, with poverty, unless there were hereditary tendency as well, or excessive drinking as a contributory factor, it is a question whether the disease would often be developed. And so, also, as regards the influence of LOCALITY. People not hereditarily predisposed, and not given to drunken habits could probably live almost anywhere with impunity, but if these factors are present their places of residence will certainly not save them from falling victims to insanity.

CONCLUSION.

We have considered in the first part of this work the various causes of insanity, and in the second part discussed their prevention.

We have seen that many and various causes contribute to produce it, but that far and away above all of them, and making by comparison almost all the other influences unimportant are the influences of HEREDITY and DRINK. It has, in fact been clearly shown that if these adverse factors were only removed, probably fully three-fourths of the Insanity now prevailing amongst us would, after a time, cease to exist.*

What measures should be taken to remove these powerful and pernicious influences have been indicated more than once in the course of this work, and the writer can now only reiterate the hope that the publication of this book will materially hasten their adoption.

^{*} It is quite true that in the Commissioners' latest Reports "Previous Attacks," and what are denominated "Unknown Causes," appear to be more potent factors than Intemperance, but as I pointed out when discussing them, the cause of the large majority of the previous attacks was probably either Alcohol or Heredity; and similarly with regard to Unknown Causes—that the real cause in large numbers of instances was undoubtedly one or the other of them, but on account of the stigma attached the information was suppressed by the relatives, and the cause in consequence entered on the Asylum Register as "Unknown."

Postscript.—Regarding the mischief caused by Drink, there is no doubt that it could be largely remedied by wise and salutory enactments of the Legislature, urged on to this course by public opinion. The Inebriates Act of 1898 is an instance of this. As regards the other factor, however, namely, Heredity, no Act of Parliament coping with the evil would, I fear, ever stand any chance of passing. To remedy this evil, then, one can only trust to the education of public opinion on the subject. This book, it is my earnest hope, will in some measure materially help to do this; but as opinions do not usually carry much weight unless supported by authority, I take the liberty, in concluding this work, to subjoin one or two extracts from the writings of one who has devoted his whole life to the study of this malady; has had unrivalled experience in it; and whose opinion on every question connected with it is admitted by all to be one of the weightiest in Great Britain. Writing on the topic of "The Duties of Medical Men in Relation to Mental Disease," he thus gives vent to his impressions:--" One of the most difficult and often most responsible duties that fall to a medical man's lot is to give confidential family advice about engagements to marry when one party has been insane, is threatened with insanity, or has an insane heredity.

Such advice may have the most serious consequences. feeling is always against the marriage of women who have been insane. I always advise young men or young women to avoid marrying into a very neurotic and insane stock, if their affections have not gone too far. The risk is very great. I quite agree with the French medical opinion that there is a special tendency for members of neurotic families to inter-marry, and an affective "affinity" among such that tends towards love and marriage. That is no doubt bad for the race and, as physiologists, we should try and stop it when we can. To have a neurotic young man marrying a fat, phlegmatic young woman may be quite admissible, and a good safe stock may result. But what are we to say about the marriage of the neurotic, thin, hysterical young women with insanity in their ancestry? We know they will not make good or safe mothers. Therefore in them we ought to discourage marriage, However good its physiological effects might be on the individual, bad mental and bodily qualities, as well as tendencies to disease, are propagated to future generations. They leave the world worse than they found it thereby, the

disease and therefore the misery in it being increased. The possible compensation of a genius once in an age is not to be trusted to. I believe a healthier kind of genius would result from better stock. Science, till it discovers a way of correcting such bad stock, must say "Do not propagate it."* With the above sensible advice I cordially agree, and earnestly commend it to the careful consideration of all interested in the subject of which this book treats.



^{*}Clinical Lectures on Mental Diseases by T. S. Clouston, M.D., 2nd edition, page 633.

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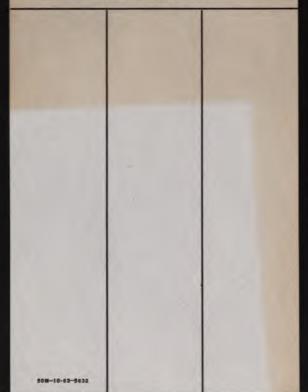






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